



GENESYS G Series

Programmable DC Power Supplies Full-Rack 1kW/1.7kW/2.7kW/3.4kW/5kW in 1U Height GSP 10kW/15kW in 2U/3U Height

! Advanced Features Built-In!

- Arbitrary Waveform Generator with Auto-Trigger Capability
 - Programmable Slew Rate Control (Vout/Iout)
- Constant Power Limit Operation Internal Resistance Programming
 - Built-In Remote Isolated Analog Interface
 - Built-In LAN (LXI 1.5), USB, and RS-232/RS-485 Interfaces
 - Optional EtherCAT, Modbus-TCP, IEEE (488.2) Interfaces
 - Blank Front Panel Option Available



TDK-Lambda

Trusted • Innovative • Reliable



The **GENESYS™** family of programmable power supplies sets a new standard for flexible, reliable, AC/DC power systems in OEM, Industrial and Laboratory applications.

Features include:

- Leading DC Programmable power density (5kW in 1U height, 10kW/15kW in 2U/3U height) in 19" rack-mount
- Light-weight 5kW<7.5 kg, GSP 10kW<15.5 kg, 15kW<23.5 kg
- Wide Range of popular worldwide AC inputs:
 - G1kW/1.7kW: 1ø (85~265VAC)
 - G2.7kW / G3.4kW: 1ø (170~265VAC), 3ø (208VAC, 400VAC)
 - G5kW / GSP10kW / 15kW: 3ø (208VAC, 400VAC & 480VAC), Wide-range 3ø 480VAC (342VAC ~ 528VAC)
- Active PFC (0.94 typical)
- Output Voltage up to 600V, Current up to 1500A
- Built-in LAN (LXI 1.5), USB, RS-232/RS-485 Interface
- Multi-Drop capability (RS-485)
- Multi-functional front panel display
- Last-Setting Memory
- Auto-Start / Safe-Start: user selectable
- High Resolution 16 bit ADCs & DACs
- Arbitrary Waveform Generator with Auto-Trigger Capability
- Store up to 100 steps into four internal memory cells
- High-speed Programming
- Constant Voltage/Constant Current operation modes
- Constant Power (CP) Limit
- Slew-Rate Control (V/I)
- Internal Resistance Programming Simulation
- Local / Remote Sensing software controlled
- Built-In Remote Isolated Analog Program/Monitor and Control Interface
- Protection functions (OVP, UVP, UVL, FOLD (CV/CC), OCL, OTP, AC FAIL)
- Fan speed controlled by ambient temperature and load
- Certified LabWindows[™]/CVI, LabVIEW[™], and IVI Drivers
- Optional EtherCAT, Modbus-TCP, IEEE (488.2) Interfaces
- 19" Rack Mount capability for ATE and OEM application
- Scalable Power Systems of 10kW and 15kW
- Parallel Systems (up to 60kW) with Auto-Configure
- Worldwide Safety Agency approvals
- CE Mark for Low Voltage, EMC and RoHS3 Directives
- Five year warranty

Applications

GENESYS[™] power supplies have been designed to meet the demands of a wide variety of applications.

Test & Measurement systems, Component Device Testing, Manufacturing and process control.

Semiconductor Processing & Burn-In, Aerospace & Satellite Testing, Medical Imaging, Green Technology.

Higher power systems can be configured with up to twelve (12) 5kW units. Each unit is 1U with zero space between them (zero stack).

OEM Designers have a wide variety of Inputs and Outputs from which to select depending on application and location.

G1kW-5kW Front Panel Description



- 1. Input Power ON/OFF Switch
- 2. Air Intake allows zero stacking for maximum system flexibility and power density.
- 3. Reliable Detent Encoders for settings and Menu navigation.
- 4. High Contrast/Brightness display with wide viewing angle, 16 segment LCD
- 5. Function/Status LEDs: Active modes and function indicators
- 6. Pushbuttons allow flexible user configuration

G1kW-5kW Rear Panel Description



- 1. Isolated Analog Programming, Monitoring and other control connector (DB26 Female)
- 2. USB Interface connector (Type B).
- 3. RS-232/RS-485 IN/OUT Remote Digital Interface (RJ-45 type) for Multi-Drop connection
- 4. LAN (LXI 1.5) Interface connector (RJ-45 type with LAN status indicators).
- 5. Auto paralleling Bus connectors (mini I/O type) for connecting Master Unit-to-Slave and Slave Unit-to-Slave unit.
- 6. Remote/Local Output Voltage Sense Connections (spring cage).
- 7. Output Connections: Rugged busbars (shown) for models up to and including 100V Output; Plug connector: PHOENIX CONTACT IPC 5/4-STF-7.62 for models with Outputs >100V.
- 8. G2.7kW / G3.4kW / G5kW AC Input: 208VAC, 400VAC & 480VAC, Three Phase, 50/60 Hz. (Model shown) AC Input Plug Connector: PHOENIX CONTACT Power Combicon PC 5/4-STCL1-7.62 Series with strain relief. G1.7kW / G2.7kW / G3.4kW AC Input Single Phase, 50/60 Hz. AC Input Plug Connector: PHOENIX CONTACT Power Combicon PC 5/3-STCL1-7.62 Series with strain relief. G1kW AC Input Connector: IEC320 C16.
- 9. Optional Interface Position for IEEE 488.2 SCPI or AnyBus Interface.
- 10. Exhaust air assures reliable operation when units are zero stacked.
- 11. Functional Ground connection (M4x8mm stud).
- 12. Reset button. Set default Power Supply settings.

GSP10kW Front Panel Description



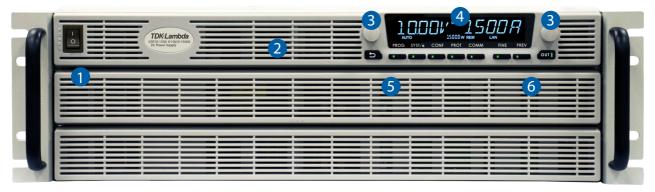
- 1. Input Power ON/OFF Switch
- 2. Air Intake allows zero stacking for maximum system flexibility and power density.
- 3. Reliable Detent Encoders for settings and Menu navigation.
- 4. High Contrast/Brightness display with wide viewing angle, 16 segment LCD
- 5. Function/Status LEDs: Active modes and function indicators
- 6. Pushbuttons allow flexible user configuration

GSP10kW Rear Panel Description



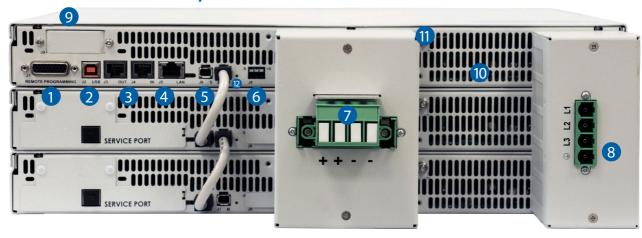
- 1. Isolated Analog Programming, Monitoring and other control connector (DB26 Female)
- 2. USB Interface connector (Type B).
- 3. RS-232/RS-485 IN/OUT Remote Digital Interface (RJ-45 type) for Multi-Drop connection
- 4. LAN (LXI 1.5) Interface connector (RJ-45 type with LAN status indicators).
- 5. Auto paralleling Bus connectors (mini I/O type) for connecting Master unit-to-Slave and Slave unit-to-Slave unit.
- 6. Remote/Local Output Voltage Sense Connections (spring cage).
- 7. Output Connections: Rugged busbars (shown) for models up to and including 100V Output; Plug connector: PHOENIX CONTACT DFK-IPC 16/4-STF-10.16 for models with Outputs >100V.
- 8. Input: 208VAC, 400VAC & 480VAC Three Phase, 50/60 Hz. AC Input Plug Connector: PHOENIX CONTACT DFK-IPC 16/4-STF-10.16 with strain relief.
- 9. Optional Interface Position for IEEE 488.2 SCPI or AnyBus Interface.
- 10. Exhaust air assures reliable operation when zero stacked.
- 11. Functional Ground connection (M4x8mm stud).
- 12. Reset button. Set default Power Supply settings.

GSP15kW Front Panel Description



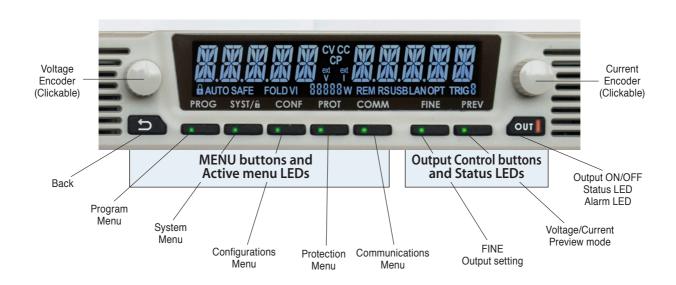
- 1. Input Power ON/OFF Switch
- 2. Air Intake allows zero stacking for maximum system flexibility and power density.
- 3. Reliable Detent Encoders for settings and Menu navigation.
- 4. High Contrast/Brightness display with wide viewing angle, 16 segment LCD
- 5. Function/Status LEDs: Active modes and function indicators
- 6. Pushbuttons allow flexible user configuration

GSP15kW Rear Panel Description

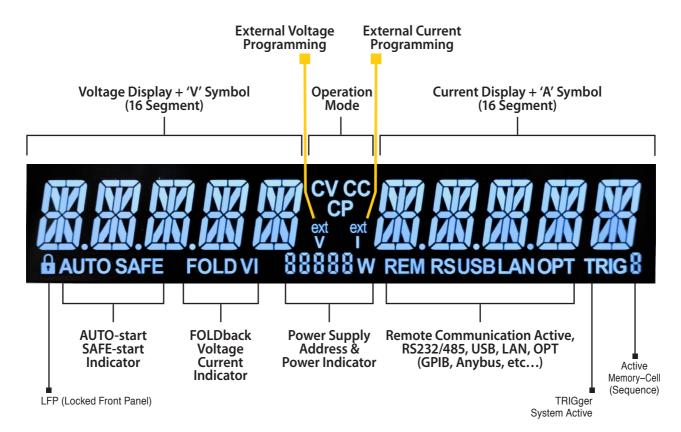


- 1. Isolated Analog Programming, Monitoring and other control connector (DB26 Female)
- 2. USB Interface connector (Type B).
- 3. RS-232/RS-485 IN/OUT Remote Digital Interface (RJ-45 type) for Multi-Drop connection
- 4. LAN (LXI 1.5) Interface connector (RJ-45 type with LAN status indicators).
- 5. Auto paralleling Bus connectors (mini I/O type) for connecting Master unit-to-Slave and Slave unit-to-Slave unit.
- 6. Remote/Local Output Voltage Sense Connections (spring cage).
- 7. Output Connections: Rugged busbars for models up to and including 100V Output; Plug connector: PHOENIX CONTACT DFK-IPC 16/4-STF-10.16 for models with Outputs >100V (shown).
- 8. Input: 208VAC, 400VAC & 480VAC Three Phase, 50/60 Hz. AC Input Plug Connector: PHOENIX CONTACT DFK-PC 16/4-ST-10.16 with strain relief.
- 9. Optional Interface Position for IEEE 488.2 SCPI or AnyBus Interface.
- 10. Exhaust air assures reliable operation when zero stacked.
- 11. Functional Ground connection (M4x8mm stud).
- 12. Reset button. Set default Power Supply settings.

Front Panel Display MENU/CONTROL buttons:



Front Panel Display indicators



GENESYS[™] G&GSP Series Blank Front Panel (ATE version) POWER (LED) REM (LED) POWER (LED)

A Blank Front Panel is available for applications where the front panel display and controls are not required and only remote interface (Digital/Analog) is needed.

The Blank Front Panel option has all the standard product functions and features except the display.

The power supply can be controlled via the rear panel Remote digital interface

(LAN, USB, RS-232/RS-485) or via the remote Isolated Analog interface.

GENESYS™ Parallel and Series Configurations

Parallel operation - Master/Slave:

Auto paralleling Scalable Master-Slave Operation. Active current sharing allows up to twelve (12) identical units to be connected

Total real current is programmed measured and reported by the Master. Up to twelve (12) supplies operate as one.

Separate Parallel Kit available for 30kW (6 unit) systems allowing easy system setup.

Order P/N: G/P - 6U

Series operation

Two units may be connected in series to increase the output voltage or to provide bipolar output. (Max 600V to Chassis Ground).

Multi-Drop Remote Programming via Communication Interface

Standard Built-in LAN, USB, RS-232 & RS-485 allows "Multi-Drop" daisy-chain control of up to 31 Power supplies on the same communication bus. Can be Daisy chained via built-in RS-485 Interface.

- First unit is LAN, USB, RS-232, RS-485, etc.
- All other units use RS-485 daisy chain with linking cable.



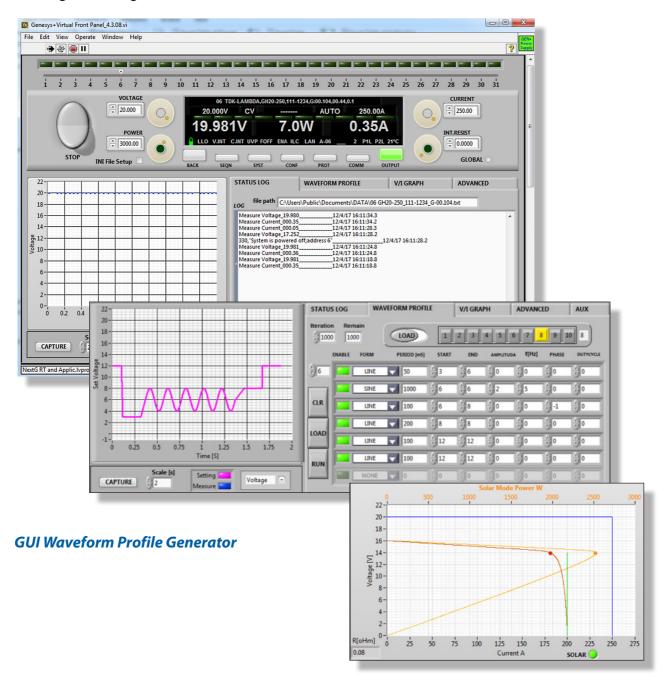




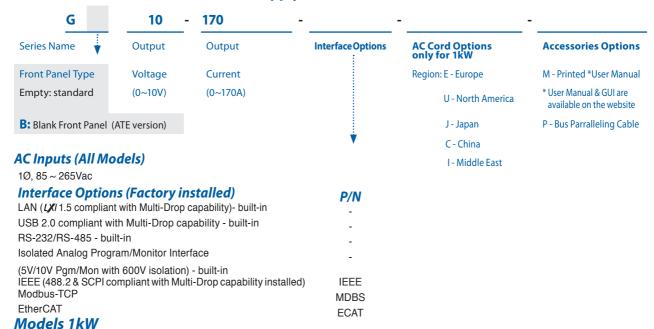
Graphical User Interface

Advanced "Virtual Front Panel" allows programming and monitoring unit(s) with or without front panel display.

- 1. Control and monitor up-to 31 units with "Address" bar
- 2. Front panel set-up menu control (PROGram, SYSTem, CONFiguration, PROTection and COMMnication)
- 3. Informative "Parameters" status bar
- 4. Individual unit and Global command control
- 5. Data logging including errors, events and recovery
- 6. Realtime Graph and Waveform creator, store/load sequence.
- 7. Solar array mode calculate MPP (Max Peak Power) for solar array.
- 8. Registers View: Operation Status, Fault, Event Status, ENABLE and INTERLOCK signals.
- 9. Remote communication state LOC, REM, LLO.
- 10. Programmed signals 1&2



How to order G1kW/1.7kW - Power Supply Identification / Accessories



Model	Voltage (V)	Current (A)	Power (W)
G10-100	0~10V	0~100	1000
G20-50	0~20V	0~50	1000
G30-34	0~30V	0~34	1020
G40-25	0~40V	0~25	1000
G60-17	0~60V	0~17	1020

Model	Voltage (V)	Current (A)	Power (W)
G80-12.5	0~80V	0~12.5	1000
G100-10	0~100V	0~10	1000
G150-7	0~150V	0~7	1050
G300-3.5	0~300V	0~3.5	1050
G600-1.7	0~600V	0~1.7	1020

Models 1.7kW

Model	Voltage (V)	Current (A)	Power (W)
G10-170	0~10V	0~170	1700
G20-85	0~20V	0~85	1700
G30-56	0~30V	0~56	1680
G40-42	0~40V	0~42	1680
G60-28	0~60V	0~28	1680

Model	Voltage (V)	Current (A)	Power (W)
G80-21	0~80V	0~21	1680
G100-17	0~100V	0~17	1700
G150-11.2	0~150V	0~11.2	1680
G300-5.6	0~300V	0~5.6	1680
G600-2.8	0~600V	0~2.8	1680

Accessories

Accessories will be sent separately from the Power Supply packing, according to order.

1. Serial Communication cable. RS-232/RS-485 cable is used to connect the power supply to the Host PC.

Mode	RS-485	RS-232
PC Connector, Communication Cable, Power Supply Connector	DB-9F. Shielded L=2m. RJ-45	DB-9F. Shielded L=2m, RJ-45
P/N	GEN/485-9	GEN/232-9

2. Serial link cable (Included with the power supply)

Daisy-chain up to 31 **GENESYS**[™] power supplies.

Mode	Power Supply Connector	Communication Cable	P/N
RS-485	RJ-45	Shielded L=50cm	GEN/RJ45

3. Bus Paralleling cable

Connectors	Cables	P/N
2013595-1 (TYCO)	Shielded L=11cm	G/P

4. User Manual

Printed User Manual	G/M

How to order G2.7kW/3.4kW - Power Supply Identification / Accessories

G 10 340 Series Name Output Interface Options **AC Input Options Accessories Options** Output Front Panel Type Voltage Current 1P208 (Single Phase 170~265VAC) M - Printed *User Manual * User Manual & GUI are Empty: standard (0~340A) (0~10V) 3P208 (Three Phase 170~265VAC) available on the website **B:** Blank Front Panel (ATE version) 3P400 (Three Phase 342~460VAC) P - Bus Parralleling Cable 3P480 (Three Phase 342~528VAC) P/N **Interface Options (Factory installed)** LAN (LXI 1.5 compliant with Multi-Drop capability)- built-in USB 2.0 compliant with Multi-Drop capability - built-in

Models G2.7kW

Modbus-TCP

EtherCAT

RS-232/RS-485 - built-in

Isolated Analog Program/Monitor Interface (5V/10V Pgm/Mon with 600V isolation) - built-in IEEE (488.2 & SCPI compliant with Multi-Drop capability installed)

Model	Output Voltage VDC	Output Current (A)	Output Power (W)	Model	Output Voltage VDC	Output Current (A)	Output Power (W)
G10-265	0~10V	0~265	2650	G80-34	0~80V	0~34	2720
G20-135	0~20V	0~135	2700	G100-27	0~100V	0~27	2700
G30-90	0~30V	0~90	2700	G150-18	0~150V	0~18	2700
G40-68	0~40V	0~68	2720	G300-9	0~300V	0~9	2700
G60-45	0~60V	0~45	2700	G600-4.5	0~600V	0~4.5	2700

IEEE

MDBS

ECAT

Models G3.4kW

Model	Output Voltage VDC	Output Current (A)	Output Power (W)	Model	Output Voltage VDC	Output Current (A)	Output Power (W)
G10-340	0~10V	0~340	3400	G80-42	0~80V	0~42	3360
G20-170	0~20V	0~170	3400	G100-34	0~100V	0~34	3400
G30-112	0~30V	0~112	3360	G150-22.5	0~150V	0~22.5	3375
G40-85	0~40V	0~85	3400	G300-11.5	0~300V	0~11.5	3450
G60-56	0~60V	0~56	3360	G600-5.6	0~600V	0~5.6	3360

Accessories

Accessories will be sent separately from the Power Supply packing, according to order.

1. Serial Communication cable. RS-232/RS-485 cable is used to connect the power supply to the Host PC.

Mode	RS-485	RS-232
PC Connector, Communication Cable, Power Supply Connector	DB-9F. Shielded L=2m. RJ-45	DB-9F. Shielded L=2m, RJ-45
P/N	GEN/485-9	GEN/232-9

2. Serial link cable (Included with the power supply)

Daisy-chain up to 31 **GENESYS™** power supplies.

Mode	Power Supply Connector	Communication Cable	P/N
RS-485	RJ-45	Shielded L=50cm	GEN/RJ45

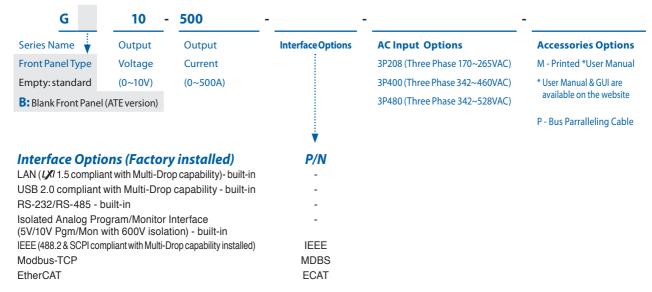
3. Bus Paralleling cable

Connectors	Cables	P/N
2013595-1 (TYCO)	Shielded L=11cm	G/P

4. User Manual

Printed User Manual	G/M			

How to order G5kW - Power Supply Identification / Accessories



Models 5kW

Model	Voltage (VDC)	Current (A)	Power (W)	Model	V
G10-500	0~10V	0~500	5000	G100-50	0
G20-250	0~20V	0~250	5000	G150-34	0
G30-170	0~30V	0~170	5100	G200-25	0
G40-125	0~40V	0~125	5000	G300-17	0
G50-100	0~50V	0~100	5000	G400-13	0
G60-85	0~60V	0~85	5100	G500-10	0
G80-65	0~80V	0~65	5200	G600-8.5	0

Model	Voltage (VDC)	Current (A)	Power (W)
G100-50	0~100V	0~50	5000
G150-34	0~150V	0~34	5100
G200-25	0~200V	0~25	5000
G300-17	0~300V	0~17	5100
G400-13	0~400V	0~13	5200
G500-10	0~500V	0~10	5000
G600-8.5	0~600V	0~8.5	5100

Accessories

Accessories will be sent separately from the Power Supply packing, according to order.

1. Serial Communication cable

RS-232/RS-485 cable is used to connect the power supply to the Host PC.

Mode	RS-485	RS-232
PC Connector Communication Cable Power Supply Connector	DB-9F Shielded L=2m RJ-45	DB-9F Shielded L=2m RJ-45
P/N	GEN/485-9	GEN/232-9

2. Serial link cable (Included with the power supply)

Daisy-chain up to 31 **GENESYS™** power supplies.

Mode	Power Supply Connector	Communication Cable	P/N
RS-485	RJ-45	Shielded L=50cm	GEN/RJ45

3. Bus Paralleling cable

Connectors	Cables	P/N
2013595-1 (TYCO)	Shielded L=11cm	G/P

4. User Manual

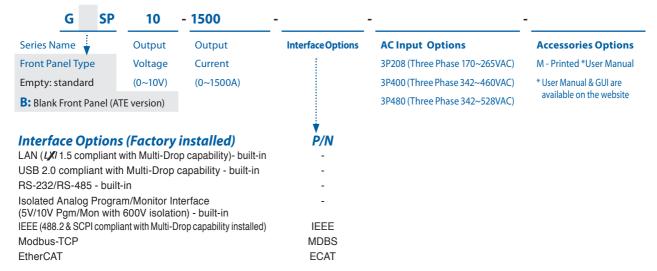
TO SEE THE THE TENE	
Printed User Manual	G/M

5. Parallel Kit: 20kW/30kW

G/P-4U: BusBar Parallel Kit for 20 kW operation (5kW Models where Vout up to 100V)

G/P-6U: BusBar Parallel Kit for 30 kW operation (5kW Models where Vout up to 100V)

How to order GSP10kW-15kW - Power Supply Identification / Accessories



Models GSP 10kW

	Model	Voltage (VDC)	Current (A)	Power (kW)	N
ĺ	GSP10-1000	0~10V	0~1000	10	GSP
	GSP20-500	0~20V	0~500	10	GSP
	GSP30-340	0~30V	0~340	10.2	GSP
	GSP40-250	0~40V	0~250	10	GSP
	GSP50-200	0~50V	0~200	10	GSP
	GSP60-170	0~60V	0~170	10.2	GSP
	GSP80-130	0~80V	0~130	10.4	GSP

Model	Voltage (VDC)	Current (A)	Power (kW)	
GSP100-100	0~100V	0~100	10	
GSP150-68	0~150V	0~68	10.2	
GSP200-50	0~200V	0~50	10	
GSP300-34	0~300V	0~34	10.2	
GSP400-26	0~400V	0~26	10.4	
GSP500-20	0~500V	0~20	10	
GSP600-17	0~600V	0~17	10.2	

Models GSP 15kW

Model	Voltage (VDC)	Current (A)	Power (kW)
GSP10-1500	0~10V	0~1500	15
GSP20-750	0~20V	0~750	15
GSP30-510	0~30V	0~510	15.3
GSP40-375	0~40V	0~375	15
GSP50-300	0~50V	0~300	15
GSP60-255	0~60V	0~255	15.3
GSP80-195	0~80V	0~195	15.6

Model	Voltage (VDC)	Current (A)	Power (kW)
GSP100-150	0~100V	0~150	15
GSP150-102	0~150V	0~102	15.3
GSP200-75	0~200V	0~75	15
GSP300-51	0~300V	0~51	15.3
GSP400-39	0~400V	0~39	15.6
GSP500-30	0~500V	0~30	15
GSP600-25.5	0~600V	0~25.5	15.3

Accessories

Accessories will be sent separately from the Power Supply packing, according to order.

1. Serial Communication cable

RS-232/RS-485 cable is used to connect the power supply to the Host PC.

Mode	RS-485	RS-232
PC Connector	DB-9F	DB-9F
Communication Cable	Shielded L=2m	Shielded L=2m
Power Supply Connector	RJ-45	RJ-45
P/N	GEN/485-9	GEN/232-9

2. Bus Paralleling cable (Included with the power supply)

Connectors	Cables	P/N
2013595-1 (TYCO)	Shielded L=11cm	G/P

3. User Manual

Printed User Manual	G/M
---------------------	-----

GENESYS[™] Family Output Voltage and Current

						Y	
Models Series	G (Std Front Panel Display) GB (Blank Front Panel Display) GSP (Scalable Power GBSP (Scalable Power GBSP)						
Rated Power	1kW	1.7kW	2.7kW	3.4kW	5kW	10kW	15kW
Voltage Range			Cı	irrent Range ((A)		
0-10V	0~100A	0~170A	0~265A	0~340A	0~500A	0~1000A	0~1500A
0-20V	0~50A	0~85A	0~135A	0~170A	0~250A	0~500A	0~750A
0-30V	0~34A	0~56A	0~90A	0~112A	0~170A	0~340A	0~510A
0-40V	0~25A	0~42A	0~68A	0~85A	0~125A	0~250A	0~375A
0-50V	-	-	-	-	0~100A	0~200A	0~300A
0-60V	0~17A	0~28A	0~45A	0~56A	0~85A	0~170A	0~255A
0-80V	0~12.5A	0~21A	0~34A	0~42A	0~65A	0~130A	0~195A
0-100V	0~10A	0~17A	0~27A	0~34A	0~50A	0~100A	0~150A
0-150V	0~7A	0~11.2A	0~18A	0~22.5A	0~34A	0~68A	0~102A
0-200V	-	-	-	-	0~25A	0~50A	0~75A
0-300V	0~3.5A	0~5.6A	0~9A	0~11.5A	0~17A	0~34A	0~51A
0-400V	-	-	-	-	0~13A	0~26A	0~39A
0-500V	-	-	-	-	0~10A	0~20A	0~30A
0-600V	0~1.7A	0~2.8A	0~4.5A	0~5.6A	0~8.5A	0~17A	0~25.5A
Weight (kg/lb)	5/11	5/11	6.25/14.3	6.25/14.3	7.5/16.5	15.5/34.2	23.5/51.8

AC Input Range

Rated Power	1kW	1.7kW	2.7kW	3.4kW	5kW	10kW	15kW
1Ø, 85-265Vac	*	*	N/A	N/A	N/A	N/A	N/A
1Ø, 170-265Vac			*	*	N/A	N/A	N/A
3P208	N/A	N/A	*	*	*	*	*
3P400	N/A	N/A	*	*	*	*	*
3P480	N/A	N/A	*	*	*	*	*

Also available GH 1kW/1.5kW Series Half-Rack 1kW/1.5kW in 1U Height



Models 1kW

Model	Voltage (V)	Current (A)	Power (W)
GH10-100	0~10V	0~100	1000
GH20-50	0~20V	0~50	1000
GH30-34	0~30V	0~34	1020
GH40-25	0~40V	0~25	1000
GH60-17	0~60V	0~17	1020

Model	Voltage (V)	Current (A)	Power (W)
GH80-12.5	0~80V	0~12.5	1000
GH100-10	0~100V	0~10	1000
GH150-7	0~150V	0~7	1050
GH300-3.5	0~300V	0~3.5	1050
GH600-1.7	0~600V	0~1.7	1020

Models 1.5kW

Model	Voltage (V)	Current (A)	Power (W)
GH10-150	0~10V	0~150	1500
GH20-75	0~20V	0~75	1500
GH30-50	0~30V	0~50	1500
GH40-38	0~40V	0~38	1520
GH60-25	0~60V	0~25	1500

Model	Voltage (V)	Current (A)	Power (W)
GH80-19	0~80V	0~19	1520
GH100-15	0~100V	0~15	1500
GH150-10	0~150V	0~10	1500
GH300-5	0~300V	0~5	1500
GH600-2.6	0~600V	0~2.6	1560

GENESYS[™] 1kW SERIES SPECIFICATIONS

					1		1		,		
OUTPUT RATING	G	10-100	20-50	30-34	40-25	60-17	80-12.5	100-10	150-7	300-3.5	600-1.7
1.Rated output voltage(*1)	V	10	20	30	40	60	80	100	150	300	600
2.Rated output current (*2)	A	100	50	34	25	17	12.5	10	7	3.5	1.7
3.Rated output power	W	1000	1000	1020	1000	1020	1000	1000	1050	1050	1020
INPUT CHARACTERISTICS	V	10	20	30	40	60	80	100	150	300	600
1.Input voltage/freq. (*3)			ontinuous, 47			- 00	1 00	100	1 .50	300	
2. Maximum Input current at 100% load (100/200)	A	12.5/6.5	Ontinuous, 17	03112,3111gic	Tilase						
3.Power Factor (Typ)		_	c 0.98 @ 200	Vac rated out	nut nower						
4.Efficiency at 100 Vac/200Vac, rated output (*17)	%	86/88	87/89	87/89	87/89	87/89	87/89	88/90	88/90	88/90	88/90
5.Inrush current (*5)	A	Less than 50/		07/05	07/07	07/07	07/07	00/70	00/70	00/30	00/70
	-	1	1						I		
CONSTANT VOLTAGE MODE	V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*6)		0.01% of rate	d output volta	age							
2.Max. Load regulation (*7)		0.01% of rate	d output volta	age +2mV							
3.Ripple and noise (p-p, 20MHz) (*8)	mV	50	50	50	60	60	75	75	75	120	500
4.Ripple r.m.s. 5Hz~1MHz (*8)	mV	6	6	6	7	7	10	12	9	20	100
5.Temperature coefficient	PPM/°C	50PPM/°C fro	m rated outp	ut voltage fol	lowing 30 min	utes warm-u	n				
6.Temperature stability							p. Constant lin	e load & tem	n		
7. Warm-up drift							wing power on		Ρ.		
	V				1		1 .		-	-	-
8.Remote sense compensation/wire (*10)	_	2	2	5	5	5	5	5	5	5	5
9.Up-prog. Response time (*11)	mS	35	35	35	35	35	35	40	50	100	100
10.Down-prog.response time:	mS	35	30	60	60	60	60	80	120	220	220
No load (*12)	mS	500	700	1000	1200	1500	1700	2600	2900	4600	4600
11.Transient response time	mS								rated output c	urrent. Outpu	t set-point:
·				than 1mS, fo	r models up to	and includin	g 100V. 2mS, fo	or models abo	ove 100V.		
12.Start up delay	Sec	Less than 6 S	ec								
13.Hold-up time	mS				20	ms typical, ra	ted output po	wer			
CONSTANT CURRENT MODE	V	10	20	30	40	60	80	100	150	300	600
	+				40	00	00	100	130	300	000
1.Max. Line regulation (*6)		+	d output curr								
2.Max. Load regulation (*9)			d output curr	1			1	1	1		
3.Ripple r.m.s. @ rated voltage. B.W 5Hz~1MHz. (*13)	mA	≤420	≤160	≤100	≤60	≤50	≤30	≤20	≤10	≤8	≤5
5.Temperature coefficient	PPM/°C	10V~100V	100PPM/°C fr	om rated out	out current, fo	llowing 30 m	inutes warm-u	p.			
3.Temperature coefficient	FFIVI/ C	150V~600V	70PPM/°C fro	m rated outp	ut current, foll	owing 30 mir	utes warm-up				
6.Temperature stability		0.01% of rate	d lout over 8h	rs. interval fol	lowing 30 min	utes warm-u	p. Constant lin	e, load & tem	perature.		
		10V~100V m	odel: Less thar	n +/-0.25% of i	rated output c	urrent over 3	0 minutes follo	wing power o	on.		
7. Warm-up drift							utes following				
ANALOG PROGRAMMING AND MONITORING (ISOLATE	FROM 1										
1.Vout voltage programming		0~100%, 0~5	V or 0~10V, us	er selectable.	Accuracy and	linearity: +/-	0.15% of rated	Vout.			
2.lout voltage programming (*14)		0~100%, 0~5	V or 0~10V, us	er selectable.	Accuracy and	linearity: +/-	0.4% of rated lo	out.			
3.Vout resistor programming		0~100%, 0~5	/10Kohm full:	scale, user sel	ectable. Accur	acy and linea	rity: +/-0.5% of	f rated Vout.			
4.lout resistor programming (*14)		0~100%, 0~5	/10Kohm full	scale, user sel	ectable. Accur	acy and linea	rity: +/-0.5% of	f rated lout.			
5.Output voltage monitor					/: +/-0.5% of ra						
6.Output current monitor (*14)		_			/: +/-0.5% of ra					-	
		10 31 01 0 10	, user sereett	abierriceurue,	7. 17 0.570 01 10						
SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPL	IT)										
1. Power supply OK #1 signal		Power supply	y output moni	tor. Open coll	ector. Output	On: On. Outp	ut Off: Off. Ma:	ximum Voltag	ge: 30V, Maxim	um Sink Curre	nt: 10mA.
2. CV/CC signal		CV/CC Monit	or. Open colle	ctor. CC mode	: On. CV mode	: Off. Maximu	ım Voltage: 30	V, Maximum S	Sink Current: 10	0mA.	
3. LOCAL/REMOTE Analog control		Enable/Disab	ole analog pro	gramming co	ntrol by electr	ical signal or	dry contact. Re	emote: 0~0.6\	/ or short. Loca	l: 2~30V or op	en.
4. LOCAL/REMOTE Analog signal	T								oltage: 30V, Max		
5. ENABLE/DISABLE signal									er selectable lo		
6. INTERLOCK (ILC) control					-		e: 0~0.6V or sh		_	ogic.	-
					, ,					/zonor¹	
7. Programmed signals									Shunted by 27\		F1/ ::
8. TRIGGER IN / TRIGGER OUT signals									ximum high l	evel input =	5V positive
<u> </u>			Voltage: 0~0.6			iuiii, iviiii de	lay between	∠ puises im	٥.		
9. DAISY_IN/SO control signal	_	+ -					-				
10. DAISY_OUT/PS_OK #2 signal		4~5V=OK, 0\	/ (500ohm imp	peαance)=Fail							
FUNCTIONS AND FEATURES											
1. Parallel operation		Possible. Un	to 4 identical i	units in Maste	r/Slave mode	Refer to instr	uction manual				
2. Series operation					truction manu			-			
3. Daisy chain							r turn-on and	turn-off			
-					· · · · ·				o v th o fort	n al	
4. Constant power control	_						_		or the front par		
5. Output resistance control									ports or the fr		
6. Slew rate control						rogramming	range: 0.0001~	-999.99 V/mS	ec. or A/mSec.	Programming	via the
7 Avhitvavu ugusfave -	1		ion ports or th			olle A -+' '	n hu	duin H	mami+:	uto on book	
7. Arbitrary waveforms		Profiles of up	to 100 steps	Lan be stored	ııı 4 memory c	ens. Activatio	on by comman	u via the com	munication po	ir is or by the fi	ont panel.
PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*16) Interfaces)	V	10	20	30	40	60	80	100	150	300	600
1.Vout programming accuracy (*15)		0.05% of rate	d output volta	age							
2.lout programming accuracy (*14)					ted output cu	rrent					
3.Vout programming resolution	T		ed output vol								
4.lout programming resolution			ed output cur								
5.Vout readback accuracy	+		ed output volt						0.250/ 1	1	
6.lout readback accuracy (*14)			output curre				_			ed output curr	
7.Vout readback resolution (of rated output voltage)	%	0.011%	0.006%	0.004%	0.003%	0.002%	0.002%	0.011%	0.007%	0.004%	0.002%
8.lout readback resolution (of rated output current))	%	0.011%	0.003%	0.004%	0.005%	0.007%	0.009%	0.011%	0.015%	0.004%	0.007`%

GENESYS[™] 1.7kW SERIES SPECIFICATIONS

OUTPUT RATING	G	10-170	20-85	30-56	40-42	60-28	80-21	100-17	150-11.2	300-5.6	600-2.8
1.Rated output voltage(*1)	V	10	20	30	40	60	80	100	150	300	600
2.Rated output current (*2)	A	170	85	56	42	28	21	17	11.2	5.6	2.8
3.Rated output power	W	1700	1700	1680	1680	1680	1680	1700	1680	1680	1680
INPUT CHARACTERISTICS	V	10	20	30	40	60	80	100	150	300	600
1.Input voltage/freq. (*3) 2. Maximum Input current at 100% load (100/200)	A	20/10	ontinuous, 4/	~63Hz,Single	Phase						
3.Power Factor (Typ)			c 0.98 @ 200	Vac, rated out	put power.						
4.Efficiency at 100 Vac/200Vac, rated output (*19)	%	86/88	87/89	87/89	87/89	87/89	87/89	88/90	88/90	88/90	88/90
5.Inrush current (*5)	Α	Less than 50A	1						-		-
CONSTANT VOLTAGE MODE	V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*6)			d output volta								
2.Max. Load regulation (*7)			d output volta				T				
3.Ripple and noise (p-p, 20MHz) (*8)	mV	50	50	50	60 7	60 7	75	75	75	120	500
4.Ripple r.m.s. 5Hz~1MHz (*8) 5.Temperature coefficient	mV PPM/°C	6 50PPM/°C fro	m rated outpu	6 ut voltage fol	lowing 30 min		10	12	8	20	100
6.Temperature stability							p. Constant lin	e. load & temi	D.		
7. Warm-up drift							ving power on	·			
8.Remote sense compensation/wire (*10)	٧	2	2	5	5	5	5	5	5	5	5
9.Up-prog. Response time (*11)	mS	20	20	20	20	20	20	25	50	100	100
10.Down-prog.response time: Full load (*12)	mS	30	30	60	60	60	60	60	120	220	200
No load (*12)	mS	450	700	1000	1200	1500	1700	2600	2900	4600	4600
11.Transient response time	mS						r a load chang g 100V. 2mS, fo			urrent. Output	t set-point:
12.Start up delay	Sec	Less than 6 Se					J				
13.Hold-up time	mS				16	ms typical, ra	ted output pov	ver			
CONSTANT CURRENT MODE	V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*6)		-	d output curre		70	00	00	100	150	300	000
2.Max. Load regulation (*9)			d output curre								
3.Ripple r.m.s. @ rated voltage. B.W 5Hz~1MHz. (*13)	mA	≤420	≤160	≤100	≤60	≤50	≤30	≤20	≤10	≤8	≤5
5.Temperature coefficient	PPM/°C						nutes warm-u				
	FFIVI/ C						utes warm-up.				
6.Temperature stability							p. Constant line				
7. Warm-up drift							minutes follo		n.		
		150V~600V:L	.ess than +/-u.	.15% of rated (output current	over 30 minu	ıtes following ı	oower on.			
ANALOG PROGRAMMING AND MONITORING (ISOLATED											
1.Vout voltage programming							0.15% of rated \				
2.lout voltage programming (*14) 3.Vout resistor programming							0.4% of rated lo rity: +/-0.5% of				
4.lout resistor programming (*14)							rity: +/-0.5% of				
5.Output voltage monitor					/: +/-0.5% of ra		,				
6.Output current monitor (*14)					/: +/-0.5 of rate						
SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPU	T)										
1. Power supply OK #1 signal		Power supply	output moni	tor. Open coll	ector. Output	On: On. Outp	ut Off: Off. Max	cimum Voltag	e: 30V, Maxim	um Sink Curre	nt: 10mA.
2. CV/CC signal							ım Voltage: 30				
3. LOCAL/REMOTE Analog control		Enable/Disab	le analog pro	gramming co	ntrol by electr	ical signal or o	dry contact. Re	mote: 0~0.6V	or short. Loca	l: 2~30V or op	en.
4. LOCAL/REMOTE Analog signal							On. Local: Off.				rrent: 10mA.
5. ENABLE/DISABLE signal					-		or short, 2~30			ogic.	
6. INTERLOCK (ILC) control				·	· ·		e: 0~0.6V or sho			(= 0 = 0 =)	
7. Programmed signals		<u> </u>					imum sink curr input voltage				5V nositivo
8. TRIGGER IN / TRIGGER OUT signals							lay between :				
9. DAISY_IN/SO control signal				5V/2~30V or di							
10. DAISY_OUT/PS_OK #2 signal		4~5V=OK, 0V	(500ohm imp	edance)=Fail							
FUNCTIONS AND FEATURES											
1. Parallel operation		Possible. Up t	ο 4 identical ι	units in Master	r/Slave mode.	Refer to instru	uction manual.				
2. Series operation					truction manu						
3. Daisy chain					<u>, , , , , , , , , , , , , , , , , , , </u>		r turn-on and t				
4. Constant power control							the communi				
5. Output resistance control							ning via the cor		<u> </u>		via the
6. Slew rate control		communicati	on ports or th	e front panel.	an siew rate. P	rogramming	iaiige: 0.0001~	V/M56	c. or A/msec.	riogramming	vid tile
			to 100 stops o	an he stored	in 4 memory c	ells. Activatio	n by command	d via the com	nunication po	rts or by the fr	ont panel.
7. Arbitrary waveforms		Profiles of up	to 100 steps t	can be stored		-					
		Profiles of up	20	30	40	60	80	100	150	300	600
7. Arbitrary waveforms PROGRAMMING AND READBACK (USB, LAN,		10 0.05% of rate	20 d output volta	30	40		80	100	150	300	600
7. Arbitrary waveforms PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*18) Interfaces) 1. Vout programming accuracy (*15) 2. lout programming accuracy (*14)	V	10 0.05% of rate 0.1% of actua	20 d output volta l output curre	30 age ent+0.2% of ra			80	100	150	300	600
7. Arbitrary waveforms PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*18) Interfaces) 1. Vout programming accuracy (*15) 2. lout programming accuracy (*14) 3. Vout programming resolution	V	10 0.05% of rate 0.1% of actua 0.002% of rat	20 d output volta l output curre ed output vol	30 age ent+0.2% of ra tage	40		80	100	150	300	600
7. Arbitrary waveforms PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*18) Interfaces) 1. Vout programming accuracy (*15) 2. lout programming accuracy (*14) 3. Vout programming resolution 4. lout programming resolution	V	10 0.05% of rate 0.1% of actua 0.002% of rat 0.002% of rat	20 d output volta l output curre ed output vol ed output cur	30 age :nt+0.2% of ra tage rent	40		80	100	150	300	600
7. Arbitrary waveforms PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*18) Interfaces) 1.Vout programming accuracy (*15) 2.lout programming accuracy (*14) 3.Vout programming resolution 4.lout programming resolution 5.Vout readback accuracy	V	10 0.05% of rate 0.1% of actua 0.002% of rat 0.002% of rat 0.05% of rate	20 d output volta l output curre ed output vol ed output cur ed output cur	30 age nt+0.2% of ra tage rrent age	40		80	100	150	300	600
7. Arbitrary waveforms PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*18) Interfaces) 1. Vout programming accuracy (*15) 2. lout programming accuracy (*14) 3. Vout programming resolution 4. lout programming resolution	V	10 0.05% of rate 0.1% of actua 0.002% of rat 0.002% of rat 0.05% of rate	20 d output volta l output curre ed output vol ed output cur	30 age nt+0.2% of ra tage rrent age	40		80	0.011%	150	300	0.002%

GENESYS[™] 1kW/1.7kW SERIES SPECIFICATIONS

PROTECTIVE FUNCTIONS		٧	10	20	30	40	60	80	100	150	300	600
1.Foldback protection			Output shut- User presetal	down when p ble. Reset by A	ower supply o	:hanges mode le in autostart	from CV or P mode, by Po	ower Limit to wer Switch, by	CC mode or fro OUTPUT butt	om CC or Pow on, by rear pa	er Limit to CV i nel or by comi	mode. munication.
2.Over-voltage protection (OVP)				down. Reset b	y AC input re	cycle in autost	art mode, by	OUTPUT butto	on, by rear par	nel or by comr	nunication.	
3.Over -voltage programming ran	ige	V	0.5~12	1~24	2~36	2~44.1	5~66.15	5~88.2	5~110.25	5~165.37	5~330.75	5~661.5
4. Over-voltage programming acc	uracy			d output volta								
5.Output under voltage limit (UVL	_)			n adjusting Vo				programming	j. Preset by fro	nt panel or co	mmunication	port.
6.Over temperature protection				the output. Au			de.					
7. Output under voltage limit (UVI	L)		Prevents adju	ustment of Vo	ut below limit							
8. Output under voltage protection	on (UVP)			ustment of Vol wer Switch, by					je condition. R	eset by AC inp	out recycle in a	autostart
FRONT PANEL												
1.Control functions			Multiple opti	ions with 2 End	oders							
				wer Limit mar								
			OVP/UVL/UV	'P manual adju	ıst							
				unctions - OVP		dback, OCL, El	NA, ILC					
				ion Functions				or Optional c	ommunication	n interface.		
			Output ON/C	OFF. Front Pane	el Lock.							
			Communicat	ion Functions	- Selection of	Baud Rate, Ad	ldress, IP and	communication	on language.			
			Analog Conti	rol Functions -	Selection Vol	tage/resistive	programmin	g, 5V/10V, 5K/	10K programm	ning		
				tor Functions				g 5V/10V.				
2.Display				, accuracy: 0.0								
				accuracy: 0.20								
3.Front Panel Buttons Indications			OUTPUT ON,	ALARM, PREV	IEW, FINE, CO	MMUNICATIO	N, PROTECTIC	N,CONFIGUR	ATION, SYSTEN	Л, SEQUENCEF	₹.	
4. Front Panel Display Indications			Voltage, Curr (communicat	rent, Power, C\ tion), RS/USB/I	/, CC, CP, Exter _AN/IEEE com	nal Voltage, E munication, T	xternal Curre rigger, Load/S	nt, Address, LF Store Cell.	P, Autostart, S	afetstart, Fold	dback V/I, Rem	note
ENVIRONMENTAL CONDITIONS												
1.Operating temperature			0~50°C, 1009	% load								
2.Storage temperature			-30~85°C	o loud.								
3.Operating humidity		%		no condensati	ion)							
4.Storage humidity		%		no condensati								
5.Altitude			Operating: 10	0000ft (3000m), output curre	ent derating 2	%/100m or Ta	derating 1°C/	100m above 20	000m. Non op	erating: 40000	oft (12000m).
MECHANICAL												
1.Cooling			Forced air co	oling by interr	nal fans. Air flo	ow direction: fr	rom Front pai	nel to power s	upply rear			
2.Weight		kg	Less than 5kg	1.			•					
3.Dimensions (WxHxD)		mm	W: 423, H: 4	i3.6, D: 441.5 i3.6, D: 553.2					Outline drawi	ing).		
4.Vibration				ethod 514.6, Pi								
5.Shock				G, half sine, 11								
						,						
SAFETY/EMC	I		I									
1. Applicable standards:	Safety G1kW/G1.7kW		UL61010-1, C	SA22.2 No.610	10-1, IEC61010	0-1, EN61010-1						
1.1. Interface classification	G1kW/1.7kW		Vout≤50V Mo 60≤Vout≤600	odels: Output, 0V Models: Ou	J1, J2, J3, J4, J tput & J8 (sen	5, J6, J7, J8 (sei se) are hazard	nse) & J9 (com ous, J1, J2, J3,	munication o J4, J5, J6, J7 &	ptions) are No 19 (communic	n Hazardous. cation options	s) are Non Haza	ardous.
1.2 Withstand voltage	G1kW/1.7kW		Input - Grou 60V≤Vout≤1 Output & J8 Output & J8 100V <vout≤ Output & J8 Output & J8</vout≤ 	lodels: Input - nd: 2835VDC 00V Models: (sense) - J1, (sense) - Gro 600V Models (sense) - J1, (sense) - Gro nd: 2835VDC	3 1min. Input – Outp J2, J3, J4, J5 bund: 1500VI :: Input – Out J2, J3, J4, J5 bund: 2500VI	ut & J8 (sens 5, J6, J7 & J9 DC 1min, Inpu put & J8 (sens 5, J6, J7 & J9	e), J1, J2, J3 (communica it - Ground: 2 se), J1, J2, J3	, J4, J5, J6, cation options) 2835VDC 1m 3, J4, J5, J6,	J7 & J9 (comr : 850VDC 1m in. J7 and J9 (co	munication of in.	otions): 4242\	VDC 1min,
1.3 Insulation resistance			100Mohm at	25°C, 70%RH.	Output to Gro	ound 500VDC						
2.Conducted emmision				-3 Industrial e			H.1 , FCC Part	15-A, VCCI-A .				
3.Radiated emission			_	-3 Industrial e					VCCI-A			
4. EMC compliance	EMC (*4)			IEC/EN61204-								
z z compilance	1		1	3/ 2/10/1207								

- Unless otherwise noted, specifications are warranted over the ambient temperature range of 0° to 50°C NOTES:

 **I: Minimum voltage is guaranteed to maximum 0.1% of rated output voltage.

 **2: Minimum current is guaranteed to maximum 0.2% of rated output current.

 **3: For cases where conformance to various safety standards (UL, IEC, etc...) is required, to be described as 100-240Vac (50/60Hz).

 **4: Signal and control ports interface cables length: Less than 3m, DC output power port cables length: Less than 30m.

 **5: Not including EMI filter inrush current, less than 0.2mSec.

 **6: 85~132Vac or 170~265Vac. Constant load.

 **7: From No-Load to Full-Load, constant input voltage.

 **8: For 10V-150V models: Measured with JEITA RC-913TC (1:1) probe. For 200~600V models: Measured with 100:1 probe.

 **9: For load voltage change, equal to the unit voltage rating, constant input voltage.

 **10: The maximum voltage on the power supply terminals must not exceed the rated voltage.

 **11: From 10% to 90% of Rated Output Voltage, with rated, resistive load.

 **12: From 90% to 10% of Rated Output Voltage, with rated, resistive load.

 **12: From 90% to 10% of Rated Output Voltage, with rated, resistive load.

 **13: For 10V model, the ripple is measured at 20~100% of rated output voltage and rated output current. For other models, the ripple is measured at 10~100% of rated output voltage and rated output current programming, readback and monitoring accuracy do not include the warm-up and Load regulation thermal drift.

 **15: Measured at the sensing point.

 **16: Max. ambient temperature for using IEEE is 40°C.

 **17: Ta=25°C, rated output power.

GENESYS[™] 2.7kW SERIES SPECIFICATIONS

OUTPUT RATING		G	10-265	20-135	30-90	40-68	60-45	80-34	100-27	150-18	300-9	600-4.5
1.Rated output voltage(*1)		V	10	20	30	40	60	80	100	150	300	600
2.Rated output current (*2)		Α	265	135	90	68	45	34	27	18	9	4.5
3.Rated output power		W	2650	2700	2700	2720	2700	2720	2700	2700	2700	2700
		V										
INPUT CHARACTERISTICS		V	10	20	30	40	60	80	100	150	300	600
					~265Vac, 47~6			/\				
1.Input voltage/freq. 3 phase, 3 w	vire + Ground (*4)		3-Phase, 400\ 3-Phase, 480\		~460Vac, 47~				\			
					~528Vac, 47~6 ~265Vac, 47~6				ac)	-		
	3-Phase, 200V models:		10A @ 200Vac		203 vac, 470	JJIIZ (COVEI3 Z	.00/200/230/2	.+ovac)				
2. Maximum Input current at	3-Phase, 400V models:		5.5A @ 380Va									
100% load	3-Phase, 480V models:		5.5A @ 380Va									
	1-Phase, 200V models:		16.5A @ 200V									
	1 1 Hase, 2004 Hodels.				0Vac, rated ou	itnut nower						
3.Power Factor (Typ)					, rated output							
4.Efficiency (Typ) (*5) (*22)		%	88	89	89.5	90	90	90.5	90.5	90.5	90.5	90.5
5.Inrush current (*6)		A	Less than 50A		03.5	,,,,	,,,	70.5	70.5	70.5	70.5	70.5
					1							
CONSTANT VOLTAGE MODE		V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*7)			0.01% of rate		-							
2.Max. Load regulation (*8)			0.01% of rate		· -							
3.Ripple and noise (p-p, 20MHz)	(*9)	mV	75	75	75	75	80	80	100	120	200	480
4.Ripple r.m.s. 5Hz~1MHz (*9)		mV	8	10	10	12	15	15	15	20	60	100
5.Temperature coefficient		PPM/°C	50PPM/°C fro	m rated outp	ut voltage, fol	lowing 30 mir	nutes warm-u	p.				
6.Temperature stability					hrs interval fo				ne, load & tem	ıp.		
7. Warm-up drift					utput voltage							
8.Remote sense compensation/w	vire (*10)	٧	2	2	5	5	5	5	5	5	5	5
9.Up-prog. Response time (*11)	2 X - 1 = 7	mS	30	30	30	30	50	50	50	50	50	100
	Full load (*11)	mS	50	50	80	80	80	100	100	100	100	200
10.Down-prog.response time:	No load (*12)	ms mS	450	600	800	900	1100	1300	2100	2000	3200	3100
	INO 10du (* 12)	1112										
11.Transient response time		mS	10~100% I ~	ut voltage to	recover withi s than 1mS, fo	ıı u.5% ot its ra r models un ta	ated output fo	n a ioad chan g 100V 2mc 4	ye 10~90% of for models ab	rated output ove 100V	current. Outpo	ıı set-point:
12.Start up delay		Cos			3 (11011 11113, 10	i illouels up te	ouna includin	g 100 v. 21115, i	ioi illoucis ub	OVC 100V.		
12.5tart up delay		Sec	Less than 6 Se	C								
CONSTANT CURRENT MODE		V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*7)			0.05% of rate	d output curr	ent.							
2.Max. Load regulation (*13)			0.08% of rate	d output curr	ent.							
3.Ripple r.m.s. @ rated voltage. 3-	-Phase (*14)	mA	≤800	≤450	≤300	≤150	≤100	≤70	≤45	≤30	≤12	≤5
4.Ripple r.m.s. @ rated voltage. 1-	-Phase (*14)	mA	≤1200	≤600	≤300	≤300	≤200	≤100	≤60	≤40	≤12	≤8
				om rated out								
5.Temperature coefficient		PPM/°C										
		FFIVI/ C	1501/~6001/	70DDM/0C fro								
6 Tomporaturo stability					m rated outp	ut current, foll	owing 30 mir	utes warm-u	p.	noraturo		
6.Temperature stability			0.01% of rate	l lout over 8h	m rated outports. interval fol	ut current, foll lowing 30 mir	owing 30 mir nutes warm-u	utes warm-u p. Constant lii	p. ne, load & tem			
6.Temperature stability 7. Warm-up drift			0.01% of rated 10V~100V mo	d lout over 8h del: Less thar	om rated outpoors. interval fol on +/-0.25% of o	ut current, foll lowing 30 mir rated output c	owing 30 mir nutes warm-u urrent over 3	utes warm-u p. Constant lii) minutes foll	p. ne, load & tem owing power			
			0.01% of rated 10V~100V mo	d lout over 8h del: Less thar	m rated outports. interval fol	ut current, foll lowing 30 mir rated output c	owing 30 mir nutes warm-u urrent over 3	utes warm-u p. Constant lii) minutes foll	p. ne, load & tem owing power			
	MONITORING (ISOLATED		0.01% of rate 10V~100V mo 150V~600V: L	d lout over 8h del: Less thar	om rated outpoors. interval fol on +/-0.25% of o	ut current, foll lowing 30 mir rated output c	owing 30 mir nutes warm-u urrent over 3	utes warm-u p. Constant lii) minutes foll	p. ne, load & tem owing power			
7. Warm-up drift	MONITORING (ISOLATED		0.01% of rated 10V~100V mg 150V~600V: L	d lout over 8h del: Less thar ess than +/-0	om rated outpoors. interval fol on +/-0.25% of o	ut current, foll lowing 30 mir rated output c output curren	owing 30 mir nutes warm-u turrent over 30 t over 30 minu	utes warm-up. Constant lii Dininutes follutes follutes following	p. ne, load & tem owing power g power on.			
7. Warm-up drift ANALOG PROGRAMMING AND N		 D FROM 1	0.01% of rated 10V~100V mg 150V~600V: L	d lout over 8h del: Less than ess than +/-0 / or 0~10V, us	om rated outpoints. interval fol n +/-0.25% of interval fol n +/-0.25% of rated of ser selectable.	ut current, foll lowing 30 mir rated output c output curren Accuracy and	owing 30 min nutes warm-u current over 30 t over 30 minu	utes warm-up. Constant lind D minutes follutes following D.15% of rated	p. ne, load & tem owing power g power on.			
7. Warm-up drift ANALOG PROGRAMMING AND N 1. Vout voltage programming		 D FROM 1	0.01% of rate of 10V~100V mode 150V~600V: L THE OUTPUT) 0~100%, 0~5	d lout over 8h del: Less than ess than +/-0 / or 0~10V, us / or 0~10V, us	om rated outpoints. interval folion +/-0.25% of interval folion +/-0.25% of interval folion for a feet selectable.	ut current, foll lowing 30 mir rated output c output curren Accuracy and Accuracy and	owing 30 min nutes warm-u current over 30 t over 30 minu I linearity: +/-	p. Constant lin D minutes follutes following 0.15% of rated 0.4% of rated	p. ne, load & tem owing power g power on. I Vout. lout.			
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. lout voltage programming (*15 3. Vout resistor programming	5)	 D FROM 1	0.01% of rated 10V~100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5,	d lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, us V10Kohm full	om rated outpoints. interval folion +/-0.25% of interval folion +/-0.25% of interval folion for a feet selectable.	ut current, foll lowing 30 mir rated output c output curren Accuracy and Accuracy and ectable. Accur	owing 30 minutes warm-u current over 30 t over 30 minutes I linearity: +/-(racy and linea	p. Constant lind of minutes following test following 0.15% of rated 0.4% of rated rity: +/-0.5% of rated 0.4% of rated rity: +/-0.5% of r	p. ne, load & tem owing power g power on. I Vout. lout. of rated Vout.			
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 4.lout resistor programming (*15	5)	 D FROM 1	0.01% of rated 10V~100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5, 0~100%, 0~5, 0~100%, 0~5,	d lout over 8h del: Less thar ess than +/-0 V or 0~10V, us V or 0~10V, us (10Kohm full	om rated outpi irs. interval fol in +/-0.25% of i 1.15% of rated of ser selectable, ser selectable, scale, user sel scale, user sel	ut current, following 30 mir rated output coutput current Accuracy and Accuracy and ectable. Accurectable. Accurec	owing 30 minutes warm-u current over 30 t over 30 minutes I linearity: +/-(racy and linea	p. Constant lind of minutes following test following 0.15% of rated 0.4% of rated rity: +/-0.5% of rated 0.4% of rated rity: +/-0.5% of r	p. ne, load & tem owing power g power on. I Vout. lout. of rated Vout.			
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming 4.lout resistor programming (*15 5.Output voltage monitor	5)	 D FROM 1	0.01% of rated 10V~100V mc 150V~600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5, 0~100%, 0~5, 0~5V or 0~10	diout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, us V10Kohm full V10Kohm full V, user selects	om rated outpiers. interval folion +/-0.25% of interval folion +/-0.25% of rated of the series seek selectable. Scale, user selectable. Accuracy able. Accuracy	ut current, foll lowing 30 min rated output current current Accuracy and Accuracy and ectable. Accur actable. Accur	owing 30 minutes warm-u current over 30 t over 30 minutes I linearity: +/-(racy and linea	p. Constant lind of minutes following test following 0.15% of rated 0.4% of rated rity: +/-0.5% of rated 0.4% of rated rity: +/-0.5% of r	p. ne, load & tem owing power g power on. I Vout. lout. of rated Vout.			
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output current monitor (*15)	5)	 	0.01% of rated 10V~100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5, 0~100%, 0~5, 0~100%, 0~5,	diout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, us V10Kohm full V10Kohm full V, user selects	om rated outpiers. interval folion +/-0.25% of interval folion +/-0.25% of rated of the series seek selectable. Scale, user selectable. Accuracy able. Accuracy	ut current, foll lowing 30 min rated output current current Accuracy and Accuracy and ectable. Accur actable. Accur	owing 30 minutes warm-u current over 30 t over 30 minutes I linearity: +/-(racy and linea	p. Constant lind of minutes following test following 0.15% of rated 0.4% of rated rity: +/-0.5% of rated 0.4% of rated rity: +/-0.5% of r	p. ne, load & tem owing power g power on. I Vout. lout. of rated Vout.			
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming 4.lout resistor programming (*15 5.Output voltage monitor 6.Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA	5)	 D FROM 1	0.01% of rated 10V~100V mc 150V~600V: L 150V~600V: L 17HE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5, 0~5V or 0~10 0~5V or 0~10	dlout over 8h del: Less than ess than +/-0 V or 0~10V, us	om rated outpurs. interval folion 4/-0.25% of interval folion 4/-0.25% of of rated of the series electable. See selectable. Scale, user selectable. Accuracy able. Accuracy	ut current, foll lowing 30 min arted output coutput curren Accuracy and Accuracy and ectable. Accurectable. Accure	owing 30 mir nutes warm-u turrent over 3t t over 30 minu Il linearity: +/-I llinearity: +/-I racy and linea	utes warm-up. Constant lii D minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% of	p. ne, load & tem owing power g power on. I Vout. lout. of rated Vout.	on.		
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal	5)	 	0.01% of rated 10V~100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5, 0~5V or 0~10 0~5V	dlout over 8h del: Less than ess than +/-0 d or 0~10V, us d or 0~10V, us 10Kohm full V, user select V, user select output moni	om rated outpurs. interval folion 1/-0.25% of rated on 1.15% of ra	ut current, foll lowing 30 min arted output coutput curren Accuracy and Accuracy and Ectable. Accurectable. Accure	owing 30 minutes warm-u nutes warm-u nutes warm-u nuterent over 30 tover 30 minutes Il linearity: +/-t acy and linea nacy and linea On: On. Outp	utes warm-upp. Constant lii D minutes follutes following 0.15% of rated 0.4% of rated rity: +/-0.5% of rity: +/-0.5% of	p. ne, load & tem owing power power on. I Vout. lout. of rated Vout. frated lout. aximum Volta	ge: 30V, Maxir	num Sink Curr	ent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) 5. IGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal	S) ATED FROM THE OUTPU	 T)	0.01% of rated 10V~100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	dlout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~	mrated outpurs. interval foliars interval foliars. interval foliars interval foliars. interval foliars interval foliars. interval foliars inte	ut current, foll lowing 30 min rated output c oputput curren Accuracy and Accuracy and Accuracy and Ectable. Accurectable. Accur	owing 30 mir nutes warm-u current over 31 t over 30 minu Illinearity: +/-I racy and linea racy and linea On: On. Outp e: Off. Maximu	p. Constant liip p. Con	p. ne, load & tem owing power g power on. I Vout. lout. of rated Vout. frated lout. aximum Volta OV, Maximum	ge: 30V, Maxir Sink Current:	10mA.	
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal	S) ATED FROM THE OUTPU	D FROM 1 T)	0.01% of rated 10V-100V mc 150V-600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	d lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	mrated outpurs. interval folion in +/-0.25% of in +/-0.25% of or ated of ser selectable. See selectable. Scale, user selectable. Accuracy able. Accuracy itor. Open collictor. CC mode organization collictor. CC mode organizations of the collictor.	ut current, foll lowing 30 min ated output current boutput curren Accuracy and Accu	owing 30 min unutes warm-u- rurrent over 31 t over 30 min Ulinearity: +/-4 illinearity: +/-4 acy and linea acy and linea acy and linea con: On: On. Outp	utes warm-up. Constant lin D minutes foll utes following Utes following 0.15% of rated 0.4% of rated rity: +/-0.5% of rity: +/-0.5% of ut Off: Off. Ma Im Voltage: 3 dry contact. R	p. ne, load & tem owing power p power on. I Vout. lout. of rated Vout. frated lout. aximum Volta 0V, Maximum lemote: 0~0.6	ge: 30V, Maxin Sink Current: V or short. Loc	10mA. cal: 2~30V or o	pen.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) 5. IGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal	ATED FROM THE OUTPU	 T)	0.01% of rated 10V-100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5: 0~100%, 0~5: 0~100%, 0~5. 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monitot Enable/Disab analog progra	I lout over 8h del: Less than ess than +/-0 of or 0~10V, us of 0~10V,	in rated outpurs. interval foliars interval foliars. interval foliars in the foliars interval foliars in the fo	ut current, foll lowing 30 mir atted output court cared output court coupt court cared output curren Accuracy and Accuracy and Accuracy and Accuracy and Ectable. Accure catable. Accure: r: +/-0.5%. ector. Output: con. CV mod introl by electional. Open collegional.	owing 30 mir nutes warm-u- rurrent over 3'd t over 30 minu I linearity: +/-I Llinearity: +/-I acy and linea- acy and linea- cacy and linea- cacy and linea- cacy and linea- cacy and linea- cacy and linea- cacy and linea-	utes warm-up. Constant lin Jo minutes foll wites following 0.15% of rated 0.4% of rated 1.4% of rated rity: +/-0.5% of rity: +/-0.5% of 1.4% of rated 1.4% o	p. ne, load & tem owing power op power on. I Vout. lout. of rated Vout. of rated lout. aximum Volta aximum Volta Maximum Wo	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma	10mA. cal: 2~30V or op ximum Sink Cu	pen.
7. Warm-up drift ANALOG PROGRAMMING AND A 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output voltage monitor (*15) SIGNALS AND CONTROLS (ISOL 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro	ATED FROM THE OUTPU	PFROM 1 T)	0.01% of rated 10V-100V mo 150V~600V: L THE OUTPUT) 0~100%, 0~5: 0~100%, 0~5: 0~100%, 0~5. 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monitot Enable/Disab analog progra	I lout over 8h del: Less than ess than +/-0 of or 0~10V, us of 0~10V,	mrated outpurs. interval folion in +/-0.25% of in +/-0.25% of or ated of ser selectable. See selectable. Scale, user selectable. Accuracy able. Accuracy itor. Open collictor. CC mode organization collictor. CC mode organizations of the collictor.	ut current, foll lowing 30 mir atted output court cared output court coupt court cared output curren Accuracy and Accuracy and Accuracy and Accuracy and Ectable. Accure catable. Accure: r: +/-0.5%. ector. Output: con. CV mod introl by electional. Open collegional.	owing 30 mir nutes warm-u- rurrent over 3'd t over 30 minu I linearity: +/-I Llinearity: +/-I acy and linea- acy and linea- cacy and linea- cacy and linea- cacy and linea- cacy and linea- cacy and linea- cacy and linea-	utes warm-up. Constant lin Jo minutes foll wites following 0.15% of rated 0.4% of rated 1.4% of rated rity: +/-0.5% of rity: +/-0.5% of 1.4% of rated 1.4% o	p. ne, load & tem owing power op power on. I Vout. lout. of rated Vout. of rated lout. aximum Volta aximum Volta Maximum Wo	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma	10mA. cal: 2~30V or op ximum Sink Cu	pen.
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output current monitor (*15) SIGNALS AND CONTROLS (ISOL 6. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal	ATED FROM THE OUTPU	D FROM 1 T)	0.01% of rated 10V-100V mod 150V-600V: LTFHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	I lout over 8h del: Less than ess than +/-0 y or 0~10V, us y or 0~10V, us y or 0~10V, us 110Kohm full 110Koh	in rated outpurs. interval foliars interval foliars. interval foliars in the foliars interval foliars in the fo	ut current, foll lowing 30 mir rated output coutput curren Accuracy and Accuracy an	owing 30 mir nutes warm-u- turrent over 3t tover 30 minu I linearity: +/-I I linearity: +/-I acy and linearity: -/-I acy and linearity: -/-I cacy and linearity: -/-I cacy and linearity: -/-I cacy and linearity: -/	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% c ut Off: Off. Ma im Voltage: 3 d dry contact. R On. Local: Off or short, 2-3i	p. ne, load & tem owing power power on. I Vout. lout. of rated Vout. of rated Vout. of rated lout. Waximum Volta OV, Maximum emote: 0~0.6 Maximum VolV or open. U:	ge: 30V, Maxim Sink Orshort. Lov (Itage: 30V, Masser selectable	10mA. cal: 2~30V or op ximum Sink Cu	pen.
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming 4.lout resistor programming 4.lout resistor programming 6.Output voltage monitor 6.Output voltage monitor 6.Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal	ATED FROM THE OUTPU	T)	0.01% of rated 10V-100V mod 150V-600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monite Enable/Disab analog progra- Enable/Disab Enable/Disab	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~	ser rated outpurs, interval foliars, interval fo	ut current, foll lowing 30 mir rated output coupting 30 mir rated output coupting and a coupting a coupting and a coupting a coupting and a coupting a	owing 30 minutes warm-u- turrent over 3t tover 30 minutes tover 30 minutes are to to	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% of rity: +/-0.5% of ut Off: Off. Ma Im Voltage: 30 dry contact. R On. Local: Off or short, 2-38 e: 0~0.6V or sheet	p. ne, load & tem owing power p power on. I Vout. lout. of rated Vout. frated lout. of waximum Volta ov, Maximum emote: 0~0.6. OW or open. U: nort. Local: 2~	ge: 30V, Maxir Sink Current: V or short. Local Ltage: 30V, Masser selectable 30V, Masser selectable 330V or open.	10mA. cal: 2~30V or o ximum Sink Cu logic.	pen.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. lout voltage programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals	S) ATED FROM THE OUTPU	T)	0.01% of rated 10V-100V mod 150V-600V: L THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monitot Enable/Disab analog prograter Enable/Disab Enable/Disab Enable/Disab	I lout over 8h del: Less than ess than +/-0 I/ or 0~10V, us I/ oxer select. Output moni or. Open colle le analog pro mming contr le PS output I le PS output I le PS output I in programm	sm rated outpurs. interval folians interval folians. Interval folians in the foli	ut current, foll lowing 30 min rated output court current countput current Accuracy and Accuracy and Accuracy and Accuracy and Accuracy and Ectable. Accur et al. On. CV modintrol by electrol. Output et al. On. CV modintrol by electrol. Output et al. Open collegal or dry cognal or dry c	owing 30 min unutes warm-u- rurrent over 31 t over 30 min Ulinearity: +/- I linearity: +/- acy and linea acy and linea acy and linea icial signal or ctor, Ro-O-O-O ntata. Remote ntata. Remote age 25V, Max	utes warm-up. Constant lin D minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% of rity: +/-0.5% of ut Off: Off. Main Voltage: 3i dry contact. R. On. Local: Off On. Local: Off 0.1 coal: Off 0.2 co.0.5V or 3i imum sink cui	p. ne, load & tem owing power p power on. I Vout. lout. of rated Vout. frated lout. Aximum Volta ov, Maximum emote: 0~0.6 Maximum Vo ov or open. U: onort. Local: 2~ rrent 100mA (ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control	S) ATED FROM THE OUTPU	D FROM 1	0.01% of rated 10V-100V mc 150V-600V:L 150V-600V:L 17HE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V o	I lout over 8h del: Less than ess than +/-0 I/ or 0~10V, us I/	sm rated outpurs. interval folians interval folians. Interval folians in the foli	ut current, foll lowing 30 mir rated output coupting 30 mir rated output coupting and Accuracy and Accuracy and Accuracy and ectable. Accuracy r: +/-0.5%. ector. Output r: On. CV mod mir of by electra lal. Open colle gnal or dry co gnal or dry co gnal or dry co Maximum volt 0.8 W, Minimu 0.8 W, Minimum 0.8 W, Minim	owing 30 minutes warm-u- rurrent over 3t tover 30 minutes tover 30 minutes and tover 30 minutes are seen and tover 30 minutes are seen and tover 30 minutes are seen and time are seen and time are seen and time are seen are seen are seen and time are seen	utes warm-up. Constant lin Jo minutes following Jonathus following 20.15% of rated 20.4% of rated 4.4% of rated frity: +/-0.5% constant line frity: +/-0.5% constant line frity: -/-0.5% const	p. ne, load & tem owing power power on. I Vout. lout. of rated Vout. f rated Vout. f rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Volto OV or open. U: ort. Local: 2~rrent 100mA (ge = 2.5V, Maximan	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic.	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. lout voltage programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals	S) ATED FROM THE OUTPU	T)	0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 CV/CC Monite Enable/Disab Enable/Disab Enable/Disab Two open dra Two open dra Maximum ledge trigge	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, user select Output moni or. Open colle le analog pro mming contr le PS output l le PS output l in programm we level inpu: t: tw=10us n	ser rated outpurs. interval folians interval folians. Interval folians in the fol	ut current, foll lowing 30 mir rated output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-u- rurrent over 3t tover 30 minutes tover 30 minutes and tover 30 minutes are seen and tover 30 minutes are seen and tover 30 minutes are seen and time are seen and time are seen and time are seen are seen are seen and time are seen	utes warm-up. Constant lin Jo minutes following Jonathus following 20.15% of rated 20.4% of rated 4.4% of rated frity: +/-0.5% constant line frity: +/-0.5% constant line frity: -/-0.5% const	p. ne, load & tem owing power power on. I Vout. lout. of rated Vout. f rated Vout. f rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Volto OV or open. U: ort. Local: 2~rrent 100mA (ge = 2.5V, Maximan	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND N. I/Out voltage programming 2. lout voltage programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign	S) ATED FROM THE OUTPU	DFROM 1 T)	0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monite Enable/Disab analog prograte Enable/Disab Enable/Disab Enable/Disab Two open dra Maximum Ic dege trigge; By electrical V	I lout over 8h del: Less than ess than +/-0 of or 0~10V, us output monior. Open colle le analog promen le PS output I in programm w level inpt it twellous n foldtage: 0~0.06	ser rated outpurs. interval foliars interval foliars interval foliars. interval foliars interval foliars interval foliars. In 15% of rated of 1.15% of 1.15% of rated of 1.15% of 1.15% of rated of 1.15% of rated of 1.15% of rated of 1.15% of 1.15% of rated of 1.15% of 1.15% of rated	ut current, foll lowing 30 min rated output court current at the country of the country of the current at the c	owing 30 minutes warm-u- rurrent over 3t tover 30 minutes tover 30 minutes and tover 30 minutes are seen and tover 30 minutes are seen and tover 30 minutes are seen and time are seen and time are seen and time are seen are seen are seen and time are seen	utes warm-up. Constant lin Jo minutes following Jonathus following 20.15% of rated 20.4% of rated 4.4% of rated frity: +/-0.5% constant line frity: +/-0.5% constant line frity: -/-0.5% const	p. ne, load & tem owing power power on. I Vout. lout. of rated Vout. f rated Vout. f rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Volto OV or open. U: ort. Local: 2~rrent 100mA (ge = 2.5V, Maximan	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal	S) ATED FROM THE OUTPU	D FROM 1 T)	0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monite Enable/Disab analog prograte Enable/Disab Enable/Disab Enable/Disab Two open dra Maximum Ic dege trigge; By electrical V	I lout over 8h del: Less than ess than +/-0 of or 0~10V, us output monior. Open colle le analog promen le PS output I in programm w level inpt it twellous n foldtage: 0~0.06	ser rated outpurs. interval foliants interval foliants. Interval foliants in the foliants in t	ut current, foll lowing 30 min rated output court current at the country of the country of the current at the c	owing 30 minutes warm-u- rurrent over 3t tover 30 minutes tover 30 minutes and tover 30 minutes are seen and tover 30 minutes are seen and tover 30 minutes are seen and time are seen and time are seen and time are seen are seen are seen and time are seen	utes warm-up. Constant lin Jo minutes following Jonathus following 20.15% of rated 20.4% of rated 4.4% of rated frity: +/-0.5% constant line frity: +/-0.5% constant line frity: -/-0.5% const	p. ne, load & tem owing power power on. I Vout. lout. of rated Vout. f rated Vout. f rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Volto OV or open. U: ort. Local: 2~rrent 100mA (ge = 2.5V, Maximan	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monite Enable/Disab analog prograte Enable/Disab E	I lout over 8h del: Less than ess than +/-0 I or 0~10V, us I	ser rated outpurs. interval folianterval fol	ut current, foll lowing 30 min rated output court current and current accuracy and Accuracy and Accuracy and Accuracy and Accuracy and ectable. Accur ectabl	owing 30 min utes warm-u- turrent over 3t t over 30 min I linearity: +/-t acy and linea acy and acy and acy	utes warm-up. Constant lin D minutes foll utes following D.15% of rated D.4% of rated D.4% of rated rity: +/-0.5% of rity: +/-0.5% of D.15% of rated rity: -/-0.5% of D.15% of D.1	p. ne, load & tem owing power p power on. I Vout. lout. I Vout. lout. of rated Vout. of rated lout. Aximum Volta OV, Maximum emote: 0~0.6. Maximum Volto OV or open. U: nort. Local: 2~ rrent 100mA (pe = 2.5V, Ma. 2 pulses 1m	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND A 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output voltage monitor 6.Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog signal 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, us V or 0~10V, us V or 0~10V, us Ti0Kohm full Ti0Kohm full V, user select. V, user select. Output moni or. Open colle le analog pro mming contre le PS output I le PS output I le PS output I in programm we level input Ti0kage: 0~0.6 (5000hm imp	ser rated outpurs. interval folions interval folions. Interval fol	ut current, foll lowing 30 mir atted output coutput current atted output coutput current Accuracy and Accurac	owing 30 minutes warm-u- rurrent over 30 minutes warm-u- rurrent over 30 minutes and to ever 30 minutes and to ever 30 minutes and the same and the	utes warm-up. Constant lin D minutes foll utes following D.15% of rated D.4% of rated D.4% of rated rity: +/-0.5% of rity: +/-0.5% of D.15% of rated rity: -/-0.5% of D.15% of D.1	p. ne, load & tem owing power p power on. I Vout. lout. I Vout. lout. of rated Vout. of rated lout. Aximum Volta OV, Maximum emote: 0~0.6. Maximum Volto OV or open. U: nort. Local: 2~ rrent 100mA (pe = 2.5V, Ma. 2 pulses 1m	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1.Vout voltage programming 2.lout voltage programming (*15 3.Vout resistor programming (*15 5.Output voltage monitor 6.Output voltage monitor 6.Output voltage monitor 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_IN/SO CONTROL signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 0~5V or 0~10 0~5V or 0~10 to 5V or 0~10 0~5V or 0~10 0~5	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, us V or 0~10V, us V or 0~10V, us V or 0~10V, user select. Output monior. Open collelle analog promining controlle PS output I le PS output I long of the programm we level in programm vice I le PS output	ser rated outpurs. interval folions in hard outpurs. It is seen selectable. Scale, user selevable. Accuracy able.	ut current, foll lowing 30 mir atted output coupting 30 mir atted output coupting 30 mir atted output curren Accuracy and	owing 30 minutes warm-ururrent over 3t tover 30 minutes warm-ururrent over 3t tover 30 minutes warm-ururrent over 3t tover 30 minutes warm-ururrent over 30 minutes warm-ururrent warm-u	utes warm-up. Constant lin Jo minutes following Jonathus following 20.15% of rated 20.4% of rated 4.4% of rated 4.	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Volta OV or open. U: ort. Local: 2- rrent 100mA (ge = 2.5V, Max	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 siximum high	10mA. cal: 2~30V or o ximum Sink Cu logic. 7V zener)	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain	S) ATED FROM THE OUTPU	D FROM1	0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) THE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 CV/CC Monitot Enable/Disab analog prograe Enable/Disab Two open dra Maximum dr	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir rated output courtent output curren Accuracy and Acc	owing 30 minutes warm-usurrent over 3t tover 30 minutes warm-usurrent over 3t tover 30 minutes warm-usurrent over 3t tover 30 minutes warm-usurrent over 30 minutes warm-usurrent warm-u	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% c rity: +/-0.5% c ut Off: Off. Ma im Voltage: 3 ddry contact. R On. Local: Off or short, 2-3 e: 00.6V or sh imum sink cut input voltaglay between	p. ne, load & tem owing power y power on. I Vout. lout. frated Vout. of rated Vout. of rated lout. frated lout. Maximum Volta OV, Maximum emote: 0-0.6 Maximum Volta 1. Local: 2- rent 100mA (ge = 2.5V, Ma; 2) pulses 1m II. Iturn-off.	ge: 30V, Maxir Sink Current: V or short. Loc Litage: 30V, Ma ser selectable 30V or open. Shunted by 22 siximum highs.	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) 1 level input =	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monite Enable/Disab analog prograte Enable/Disab E	I lout over 8h del: Less than ess than +/-0 of or 0~10V, us of o~10V,	ser rated outpurs. interval folionaria in the value of value of the va	ut current, foll lowing 30 min rated output court current following 30 min rated output court court for the following and min rated output current for following and following f	owing 30 min utes warm-u- turrent over 3t t over 30 min I linearity: +/- I linearity: +/- I linearity: +/- acy and linea acy and linea acy and linea acy and linea con: On. Outp e: Off. Maximu ical signal or re- ctor. Remote: entact. O050 ntact. Remote mhigh level num, Min de Refer to instru acl. choronize thei gramming via	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% of rity: +/-0.5% of ut Off: Off. Maim Voltage: 30 dry contact. R On. Local: Off on short, 2-3 e: 0~0.6V or si imum sink cui input voltage lay between uction manua r turn-on and a the communication in the	p. ne, load & tem owing power y power on. I Vout. lout. I Vout. lout. of rated Vout. of rated lout. of water lout. of water lout. of one of the lout. No water loud. of or open. U. prest 100mA (ye = 2.5V, Ma. 2 pulses 1m Iturn-off. nication ports	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable 30V or open. Shunted by 27 iximum high is.	10mA. cal: 2–30V or oj ximum Sink Cu logic. 7V zener) I level input =	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain	S) ATED FROM THE OUTPU	D FROM1	0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monitot Enable/Disab analog progra Enable/Disab En	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs. interval folions in hard outpurs. It is scale, user selectable. scale, user selevable. Accuracy able. Accuracy able. Accuracy able. Accuracy interval folions in hard outpurs. It is scale, user selevable. Accuracy able. Accuracy able. Accuracy able. Accuracy able. Accuracy able. Accuracy interval in a control of the hard outpurs. It is scale in hard outpurs. It is scale in hard outpurs. It is scale in hard outpurs. It is in Maste ts. Refer to ins nected in Dais a proggramm. Resistance ra	ut current, foll lowing 30 mir atted output coutput current and output coutput current Accuracy and Accuracy	owing 30 minutes warm-u- urrent over 30 minutes warm-u- urrent over 30 minutes warm-u- l linearity: +/-1 llinearity: +/-1 llinearity: +/-1 cacy and linea- acy and linea- acy and linea- acy and linea- acy and linea- cetor. Amente- icital signal or - cetor. Remote- intact. 0-0.6V intact. 0-0	utes warm-up. Constant lid on minutes following on minutes following 0.15% of rated 0.4% of rated 0.4% of rated fifty: +/-0.5% of rity: +/-0.5% of rity: +/-0.5% of rity: +/-0.5% of rated of rity: -/-0.5% of r	p. ne, load & tem owing power power on. Vout. lout. frated Vout. frated Vout. frated lout. Aximum Volta OV, Maximum emote: 0~0.6. Maximum Vo OV or open. U: nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma; 2 pulses 1m	ge: 30V, Maxir Sink Current: V or short. Lot Itage: 30V, Max ser selectable 30V or open. Shunted by 27 eximum high s.s.	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) a level input =	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND N 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) 5. Gutput voltage monitor 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITTLE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monite Enable/Disab Enable/Disab Enable/Disab Two open dra Maximum le dge trigge By electrical V4~5V=OK, 0V Possible. Up t Possible. Two Power supplie Limits the outer the supplied of	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0~10V, user select; Output moni or. Open colle le analog pro mming control le PS output le PS output le PS output le PS output lin programm we level in programm we level in programm of 10tage: 0~0.0 (5000hm imput power to essent per control le PS output le	ser rated outpurs, interval follows. Interval foll	ut current, foll lowing 30 mir rated output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-u- urrent over 30 minutes warm-u- urrent over 30 minutes warm-u- l linearity: +/-1 llinearity: +/-1 llinearity: +/-1 cacy and linea- acy and linea- acy and linea- acy and linea- acy and linea- cetor. Amente- icital signal or - cetor. Remote- intact. 0-0.6V intact. 0-0	utes warm-up. Constant lid on minutes following on minutes following 0.15% of rated 0.4% of rated 0.4% of rated fifty: +/-0.5% of rity: +/-0.5% of rity: +/-0.5% of rity: +/-0.5% of rated of rity: -/-0.5% of r	p. ne, load & tem owing power power on. Vout. lout. frated Vout. frated Vout. frated lout. Aximum Volta OV, Maximum emote: 0~0.6. Maximum Vo OV or open. U: nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma; 2 pulses 1m	ge: 30V, Maxir Sink Current: V or short. Lot Itage: 30V, Max ser selectable 30V or open. Shunted by 27 eximum high s.s.	10mA. cal: 2–30V or oj ximum Sink Cu logic. 7V zener) I level input =	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs, interval folians, interval fo	ut current, foll lowing 30 mir rated output court current and court of the court of	owing 30 minutes warm-u- current over 3t tover 30 minutes warm-u- current over 3t tover 30 minutes ward and tover 30 minutes ward and tover 30 minutes ward and tinearity: +/-tacy and linearity: +/-tacy and	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% c rity: +/-0.5% c ut Off: Off. Ma Im Voltage: 3d dry contact. R On. Local: Off or short; 2-3 ie: 00.6V or sl imum sink cui input voltag lay between Intervenent and or turn-on and or turn-on and or the commur ing via the cc range: 0.0001	p. ne, load & tem owing power p power on. I Vout. lout. frated Vout. of rated Vout. of rated lout. of rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Vo OV or open. U: prort. Local: 2~ rrent 100m A (ge = 2.5V, Ma; 2 pulses 1m Iturn-off. nication ports mmunication ~999.99 V/mS	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable: 30V or open. Shunted by 27 iximum high is.	10mA. cal: 2–30V or opximum Sink Cu logic. 7V zener) I level input = anel. front panel. r. Programming	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control	S) ATED FROM THE OUTPU		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs, interval folians, interval fo	ut current, foll lowing 30 mir rated output court current and court of the court of	owing 30 minutes warm-u- current over 3t tover 30 minutes warm-u- current over 3t tover 30 minutes ward and tover 30 minutes ward and tover 30 minutes ward and tinearity: +/-tacy and linearity: +/-tacy and	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% c rity: +/-0.5% c ut Off: Off. Ma Im Voltage: 3d dry contact. R On. Local: Off or short; 2-3 ie: 00.6V or sl imum sink cui input voltag lay between Intervenent and or turn-on and or turn-on and or the commur ing via the cc range: 0.0001	p. ne, load & tem owing power p power on. I Vout. lout. frated Vout. of rated Vout. of rated lout. of rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Vo OV or open. U: prort. Local: 2~ rrent 100m A (ge = 2.5V, Ma; 2 pulses 1m Iturn-off. nication ports mmunication ~999.99 V/mS	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable: 30V or open. Shunted by 27 iximum high is.	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) a level input =	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 6. Slew rate control 7. Arbitrary waveforms	ATED FROM THE OUTPU		0.01% of rated 10V-100V mc 150V-600V: LI THE OUTPUT) 0~100%, 0~5' 0~100%, 0~100%	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us v or 0	ser rated outpurs. interval folions in the value of rated of the value of rated of the value of	ut current, foll lowing 30 mir atted output coupting 30 mir atted output coupting 30 mir atted output coupting 30 mir atted output curren Accuracy and Accuracy and Accuracy and Ectable. Accure etable. Accure etable. Accure etable. Accure in the 10 mir of	owing 30 minutes warm-u- rurrent over 3/t tover 30 minutes warm-u- rurrent over 3/t tover 30 minutes warm-u- l linearity: +/-t acy and linea- acy and linea- tics of f. Maxim- ical signal or- vector. Remote- nage 25V, Max m high levels minutes and linea- num, Min de- acy and linea- acy and linea- acy and linea- acy and linea- acy and linea- acy and linea- linea- acy and linea- acy and linea- linea- acy and linea- acy and li	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma Solv or open. Shunted by 2: aximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positive g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND A 1.Vout voltage programming 2. Iout voltage programming 4. Iout resistor programming 4. Iout resistor programming 6. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms	ACK (USB, LAN,		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs, interval folians, interval fo	ut current, foll lowing 30 mir rated output court current and court of the court of	owing 30 minutes warm-u- current over 3t tover 30 minutes warm-u- current over 3t tover 30 minutes ward and tover 30 minutes ward and tover 30 minutes ward and tinearity: +/-tacy and linearity: +/-tacy and	utes warm-up, constant lin O minutes foll utes following 0.15% of rated 0.4% of rated rity: +/-0.5% c rity: +/-0.5% c ut Off: Off. Ma Im Voltage: 3d dry contact. R On. Local: Off or short; 2-3 ie: 00.6V or sl imum sink cui input voltag lay between Intervenent and or turn-on and or turn-on and or the commur ing via the cc range: 0.0001	p. ne, load & tem owing power p power on. I Vout. lout. frated Vout. of rated Vout. of rated lout. of rated lout. Maximum Volta OV, Maximum emote: 0~0.6 Maximum Vo OV or open. U: prort. Local: 2~ rrent 100m A (ge = 2.5V, Ma; 2 pulses 1m Iturn-off. nication ports mmunication ~999.99 V/mS	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma ser selectable: 30V or open. Shunted by 27 iximum high is.	10mA. cal: 2–30V or opximum Sink Cu logic. 7V zener) I level input = anel. front panel. r. Programming	pen. rrent: 10mA.
7. Warm-up drift ANALOG PROGRAMMING AND A 1.Vout voltage programming 2. Iout voltage programming 4. Iout resistor programming 4. Iout resistor programming 6. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign 9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19	ACK (USB, LAN,		0.01% of rated 10V-100V mc 150V-600V: L 150V	I lout over 8h del: Less than ess than +/-0 I or 0~10V, us or 0~10V, us or 0~10V, us or o~10V, us or select. Output monior. Open collele analog promining control le PS output I le programming control of the programming control of t	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir atted output coupting 30 mir atted output coupting 30 mir atted output coupting 30 mir atted output curren Accuracy and Accuracy and Accuracy and Ectable. Accure etable. Accure etable. Accure etable. Accure in the 10 mir of	owing 30 minutes warm-u- rurrent over 3/t tover 30 minutes warm-u- rurrent over 3/t tover 30 minutes warm-u- l linearity: +/-t acy and linea- acy and linea- tics of f. Maxim- ical signal or- vector. Remote- nage 25V, Max m high levels minutes and linea- num, Min de- acy and linea- acy and linea- acy and linea- acy and linea- acy and linea- acy and linea- linea- acy and linea- acy and linea- linea- acy and linea- acy and li	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma Solv or open. Shunted by 2: aximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positiv g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND M 1. Vout voltage programming 2. lout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19 1. Vout programming accuracy (*1	ACK (USB, LAN,))(*20) Interfaces)		0.01% of rated 10V-100V mod 150V-600V: LITTLE ONLY 150V-600V: LITTLE ONLY 150V-600V: LITTLE ONLY 150V-600V: ONLY 150V-600V: ONLY 150V-600V: ONLY 150V-600V: ONLY 150V-60V-60V: ONLY 150V-60V-60V: ONLY 150V-60V: ONLY 150V-60V-60V: ONLY 150V-60V-60V: ONLY 150V-60V-60V-60V-60V-60V-60V-60V-60V-60V-6	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us v or 0~10V, user select; Output moni or. Open colle le analog pro mming control le PS output lin programm we level in or 100 stages 0~0.0 (5000hm imput power to essersistance, le Output rises on ports or the to 100 steps of doutput volts.	ser rated outpurs. interval folinary in the rated outpurs. interval folinary in the rate of the rate o	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma Solv or open. Shunted by 2: aximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positiv g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND M. 1. Vout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Output voltage monitor 6. Output voltage monitor 6. Output voltage monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 6. Slew rate control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA FES232/485, Optional IEEE(*19 1. Vout programming accuracy (*1 2. lout programming accuracy (*1 2. lout programming accuracy (*1 2. lout programming accuracy (*1	ACK (USB, LAN,))(*20) Interfaces)		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) FILE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monitod Enable/Disab analog prograse analog/Disab Enable/Disab	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs. interval folion in the value of va	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma Solv or open. Shunted by 2: aximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positiv g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) 5. Output voltage monitor 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19 1. Vout programming accuracy (*1 2. Jout programming accuracy (*1 3. Vout programming accuracy (*1 4. Vout programming accuracy	ACK (USB, LAN,))(*20) Interfaces)		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) FHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monito Enable/Disab analog program Maximum Ic dedge trigger By electrical V 4~5V=OK, 0V Possible. Up t Possible. Two Power supplications the output Indicate Service Se	I lout over 8h del: Less than ess than +/-0 V or 0~10V, us V or 0	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma Solv or open. Shunted by 2: aximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positiv g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Vout voltage programming 1. Vout voltage programming 3. Vout resistor programming 4. Lout resistor programming 4. Lout resistor programming 6. Output voltage monitor 6. Output current monitor 6. Output current monitor 7. Power supply OK #1 signal 7. LOCAL/REMOTE Analog contro 7. LOCAL/REMOTE Analog signal 7. ENABLE/DISABLE signal 7. ENABLE/DISABLE signal 7. RIGGER IN / TRIGGER OUT signal 7. Programmed signals 7. RIGGER IN / TRIGGER OUT signal 7. Programmed signal 7. DAISY_IN/SO control signal 7. DAISY_IN/SO control signal 7. DAISY_IN/SO control signal 7. Parallel operation 7. Series operation 7. Series operation 7. Series operation 7. Constant power control 7. Arbitrary waveforms 7. Arbitrary waveforms 7. Arbitrary waveforms 7. PROGRAMMING AND READBA 7. RS232/485, Optional IEEE(*19) 7. Lout programming accuracy (*1 7. Avout programming resolution 7. Alout programming resolution	ACK (USB, LAN,))(*20) Interfaces)		0.01% of rated 10V-100V mo 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monito Enable/Disab analog prograte Enable/Disab En	I lout over 8h del: Less than ess than +/-0 or 0~10V, us	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma Solv or open. Shunted by 2: aximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positive g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Nout voltage programming 2. Jout voltage programming (*15 3. Vout resistor programming (*15 3. Vout resistor programming (*15 5. Output voltage monitor 6. Output current monitor (*15) 5. Output voltage monitor 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog contro 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19 1. Vout programming accuracy (*1 2. Jout programming accuracy (*1 3. Vout programming accuracy (*1 4. Vout programming accuracy	ACK (USB, LAN,))(*20) Interfaces)		0.01% of rated 10V-100V mod 150V-600V: LITHE OUTPUT) FHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monito Enable/Disab analog program Maximum Ic dedge trigger By electrical V 4~5V=OK, 0V Possible. Up t Possible. Two Power supplications the output Indicate Service Se	I lout over 8h del: Less than ess than +/-0 or 0~10V, us	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma sor selectable 30V or open. Shunted by 22 iximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positive g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND A 1. Vout voltage programming 1. Vout voltage programming 3. Vout resistor programming 4. Lout resistor programming 4. Lout resistor programming 6. Output voltage monitor 6. Output current monitor 6. Output current monitor 7. Power supply OK #1 signal 7. LOCAL/REMOTE Analog contro 7. LOCAL/REMOTE Analog signal 7. ENABLE/DISABLE signal 7. ENABLE/DISABLE signal 7. RIGGER IN / TRIGGER OUT signal 7. Programmed signals 7. RIGGER IN / TRIGGER OUT signal 7. Programmed signal 7. DAISY_IN/SO control signal 7. DAISY_IN/SO control signal 7. DAISY_IN/SO control signal 7. Parallel operation 7. Series operation 7. Series operation 7. Series operation 7. Constant power control 7. Arbitrary waveforms 7. Arbitrary waveforms 7. Arbitrary waveforms 7. PROGRAMMING AND READBA 7. RS232/485, Optional IEEE(*19) 7. Lout programming accuracy (*1 7. Avout programming resolution 7. Alout programming resolution	ACK (USB, LAN,))(*20) Interfaces)		0.01% of rated 10V-100V mo 150V-600V: LITHE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5V or 0~10 0~5V or 0~10 Power supply CV/CC Monito Enable/Disab analog prograte Enable/Disab En	I lout over 8h del: Less than ess than +/-0 I or 0~10V, us or 0~10V, us or 0~10V, us or o~10V,	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for fated in Jo minutes for fated for fa	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma sor selectable 30V or open. Shunted by 22 iximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positive g via the front panel.
7. Warm-up drift ANALOG PROGRAMMING AND A 1.Vout voltage programming 2. Iout voltage programming 4. Iout resistor programming 4. Iout resistor programming 6. Output voltage monitor 6. Output voltage monitor 6. Output current monitor (*15) SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19 1. Vout programming accuracy (*1 2. Nout programming resolution 4. Iout programming resolution 5. Vout readback accuracy	ACK (USB, LAN, 1)(*20) Interfaces)		0.01% of rated 10V-100V mc 150V-600V:L 150V-600V:L 17HE OUTPUT) 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~100%, 0~5' 0~5'V or 0~10 0~10 0~10 0~10 0~10 0~10 0~10 0~1	I lout over 8h del: Less than ess than +/-0 I or 0~10V, us or 0~10V, us or 0~10V, us or o~10V,	ser rated outpurs. interval follows. Interval fo	ut current, foll lowing 30 mir atted output coutput curren Accuracy and Accuracy an	owing 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 3t tover 30 minutes warm-ururent over 30 minutes warm warm warm warm warm warm warm warm	utes warm-up. Constant lin Jo minutes following Jo minutes for following Jo minutes for Jo minutes following Jo minutes for foll	p. ne, load & tem owing power power on. I Vout. lout. frated Vout. frated Vout. frated lout. frated lout. frated lout. frated lout. frated lout. I Vout. lout. frated lout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. frated lout. I vout. frated lout. I vout. frated lout. frated lout. I vout. frated lout. frated	ge: 30V, Maxir Sink Current: V or short. Loc Itage: 30V, Ma sor selectable 30V or open. Shunted by 22 iximum high s. or the front p n ports or the iec. or A/mSec	10mA. cal: 2~30V or op ximum Sink Cu logic. 7V zener) al level input = anel. front panel. r. Programming ports or by the	pen. rrent: 10mA. 5V positive g via the front panel.

GENESYS[™] 3.4kW SERIES SPECIFICATIONS

0UTPUT RATING 1.Rated output voltage(*1) 2.Rated output current (*2)		G	10-340	20-170	30-112	40-85	60-56	80-42	100-34	150-22.5	300-11.5	600-5.6
		V	10	20	30	40	60	80	100 34	150 22.5	300	600
Z BAJEO OUTOUT CUTTENT (* 7)		A	340 (*3)	170	112	85	56	42	34	22.5	11.5	5.6
3.Rated output power		W	3400	3400	3360	3400	3360	3360	3400	3375	3450	3360
INPUT CHARACTERISTICS		V	10 2 Phase 200	20	30	40	60	80	100	150	300	600
)~265Vac, 47~। 2~460Vac, 47~			/ac)				
1.Input voltage/freq. 3 phase, 3 w	ire + Ground (*4)		3-Phase, 480	V models: 342	2~528Vac, 47~	63Hz (Covers	380/400/415/4	140/460/480Va	ac)			
l					~265Vac, 47~6							
	3-Phase, 200V models:		12.5A @ 200V									
2. Maximum Input current at	3-Phase, 400V models:		6.5A @ 380Va									
100% load	3-Phase, 480V models:		6.5A @ 380Va									
	1-Phase, 200V models:		21A @ 200Va								-	
3.Power Factor (Typ)					80Vac, rated or							
4.Efficiency (Typ) (*5) (*22)		%	88	0.99 @ 200Vac	c, rated output 89.5	90	90	90.5	90.5	90.5	90.5	90.5
5.Inrush current (*6)		A	Less than 50/		05.3	70	70	70.3	70.3	90.3	30.3	90.3
CONSTANT VOLTAGE MODE		V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*7)				d output volta								
2.Max. Load regulation (*8)				d output volta	т —							
3.Ripple and noise (p-p, 20MHz) ((*9)	mV	75	75	75	75	80	80	100	120	200	480
4.Ripple r.m.s. 5Hz~1MHz (*9)		mV	8	10	10	12	15	15	15	20	60	100
5.Temperature coefficient		PPM/°C			out voltage, fol							
6.Temperature stability								ıp. Constant lir		ıp.		
7. Warm-up drift	: (*10)			1				wing power o		-	-	-
8.Remote sense compensation/w	ire (*10)	V	2	2	5	5	5	5	5	5	5	5
9.Up-prog. Response time (*11)	F III 2000	mS	30	30	30	30	50	50	50	50	50	100
	Full load (*11)	mS	50	50	80	80	80	100	100	100	100	200
	No load (*12)	mS	450 T: (600	800	900	1100	1300	2100	2000	3000	3100
11.Transient response time		mS						or a load chan ig 100V. 2mS, f		rated output	current. Outp	ut set-point:
12.Start up delay		Sec	Less than 6 Se		3 (11011 11113, 10	i illoueis up to	and meladii	ig 100v. 21115, 1	or models ab	ove 100v.		
12.Start up delay		sec	Less than 6 36	,c								
CONSTANT CURRENT MODE		V	10	20	30	40	60	80	100	150	300	600
1.Max. Line regulation (*7)			0.05% of rate	d output curr	ent.							
2.Max. Load regulation (*13)			0.08% of rate	d output curr	ent.							
3.Ripple r.m.s. @ rated voltage. 3-l		mA	≤800	≤450	≤300	≤150	≤100	≤70	≤45	≤30	≤12	≤5
4.Ripple r.m.s. @ rated voltage. 1-l	mA	≤1200	≤600	≤300	≤300	≤200	≤100	≤60	≤40	≤12	≤8	
5.Temperature coefficient		PPM/°C						inutes warm-u				
								nutes warm-up				
6.Temperature stability								p. Constant lir				
7. Warm-up drift								0 minutes foll		on.		
			150V~600V: l	ess than +/-0).15% of rated	output curren	t over 30 min	utes following	power on.			
ANALOG PROGRAMMING AND M	MONITORING (ISOLATED	FROMT	HE OUTPUT)								-	
1.Vout voltage programming				V or 0~10V. us	ser selectable.	Accuracy and	l linearity: +/-	0.15% of rated	Vout.			
2.lout voltage programming (*15)							0.4% of rated I				
3.Vout resistor programming								rity: +/-0.5% c				
4.lout resistor programming (*15))							rity: +/-0.5% c				
5.Output voltage monitor			0~5V or 0~10	V, user select	able. Accuracy	v· +/-0 5%						
6.Output current monitor (*15)			0~5V or 0~10	V usor solost								
				iv, user selecti	able. Accuracy							
	TED EDOM THE OUTDI		0 37 01 0 10	v, user select	able. Accuracy							
SIGNALS AND CONTROLS (ISOLA	ATED FROM THE OUTPU	T)				y: +/-0.5%.	On On Outn	ut Off. Off Ma	avimum Volta	go: 201/ Mayin	oum Sink Curr	ont: 10mA
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal	ATED FROM THE OUTPU	T)	Power supply	/ output moni	itor. Open coll	y: +/-0.5%. lector. Output				ge: 30V, Maxin		ent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal		T)	Power supply	/ output moni or. Open colle	itor. Open coll	y: +/-0.5%. lector. Output e: On. CV mod	e: Off. Maxim	um Voltage: 30	V, Maximum	Sink Current:	10mA.	
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control		T)	Power supply CV/CC Monite Enable/Disab	y output moni or. Open colle ble analog pro	itor. Open coll ector. CC mode ogramming co	y: +/-0.5%. lector. Output e: On. CV mod introl by electr	e: Off. Maxim rical signal or	um Voltage: 30 dry contact. R	OV, Maximum emote: 0~0.6	Sink Current: V or short. Loc	10mA. :al: 2~30V or o	pen.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal		T)	Power supply CV/CC Monit Enable/Disab analog progr	output moni or. Open colle ole analog pro amming contr	itor. Open coll ector. CC mode ogramming co rol monitor sig	y: +/-0.5%. lector. Output e: On. CV mod ntrol by electronal. Open colle	e: Off. Maxim rical signal or ector. Remote:	um Voltage: 30 dry contact. R On. Local: Off.	OV, Maximum emote: 0~0.6 Maximum Vo	Sink Current: V or short. Loc Itage: 30V, Ma	10mA. :al: 2~30V or o ximum Sink Cu	pen.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal		T) 	Power supply CV/CC Monite Enable/Disab analog progra Enable/Disab	y output moni or. Open colle ole analog pro amming contr ole PS output l	itor. Open coll ector. CC mode ogramming co rol monitor sig by electrical si	y: +/-0.5%. lector. Output e: On. CV mod introl by electi nal. Open colle ignal or dry co	e: Off. Maximorical signal or ector. Remote: ontact. 0~0.6\	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30	OV, Maximum emote: 0~0.6 Maximum Vo OV or open. U	Sink Current: V or short. Loo Itage: 30V, Ma ser selectable	10mA. :al: 2~30V or o ximum Sink Cu	pen.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control		T)	Power supply CV/CC Monite Enable/Disak analog progra Enable/Disak Enable/Disak	y output moni or. Open colle ole analog pro amming contr ole PS output I ole PS output I	itor. Open coll ector. CC mode ogramming co rol monitor sig by electrical si by electrical si	y: +/-0.5%. lector. Output e: On. CV mod ntrol by electi nal. Open colle ignal or dry co	e: Off. Maximorical signal or ector. Remote: ontact. 0~0.6V ontact. Remot	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh	OV, Maximum emote: 0~0.6 Maximum Vo OV or open. U: nort. Local: 2~	Sink Current: V or short. Loc Itage: 30V, Ma: ser selectable :30V or open.	10mA. :al: 2~30V or o ximum Sink Cu logic.	pen.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals	I	T)	Power supply CV/CC Monite Enable/Disab analog progra Enable/Disab Enable/Disab Two open dra	y output moni or. Open colle ole analog pro amming contr ole PS output I ole PS output I ain programm	itor. Open coll ector. CC mode ogramming co rol monitor sig by electrical si by electrical si nable signals. I	y: +/-0.5%. lector. Output e: On. CV mod introl by electional. Open colle ignal or dry co- ignal or dry co- Maximum volit	e: Off. Maximi rical signal or ector. Remote: intact. 0~0.6V intact. Remot tage 25V, Max	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh imum sink cui	DV, Maximum emote: 0~0.6 Maximum Vo DV or open. Us nort. Local: 2~ rrent 100mA (Sink Current: V or short. Loc Itage: 30V, Maz ser selectable ·30V or open. Shunted by 27	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control	I	T)	Power supply CV/CC Monite Enable/Disab analog progre Enable/Disab Enable/Disab Two open dra Maximum le	y output moni or. Open colle ole analog pro amming contr ole PS output I ole PS output I ain programm ow level inpu	itor. Open coll ector. CC mode ogramming co rol monitor sig by electrical si by electrical si nable signals. I	y: +/-0.5%. lector. Output e: On. CV mod introl by electinal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu	e: Off. Maximi rical signal or ector. Remote: intact. 0~0.6V intact. Remot tage 25V, Max m high leve	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh imum sink cui	DV, Maximum emote: 0~0.6 Maximum Vo DV or open. Us nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT sign	I	T)	Power supply CV/CC Monit Enable/Disak analog progr Enable/Disak Enable/Disak Two open dra Maximum le	y output monion. Open colle ole analog pro amming controle PS output I ole PS output I ain programm ow level inpur: tw=10us n	itor. Open coll ector. CC mode ogramming co rol monitor sig by electrical si by electrical si nable signals. I	y: +/-0.5%. lector. Output e: On. CV mod introl by electinal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu Tf=1us Maxir	e: Off. Maximi rical signal or ector. Remote: intact. 0~0.6V intact. Remot tage 25V, Max m high leve	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh imum sink cur I input voltac	DV, Maximum emote: 0~0.6 Maximum Vo DV or open. Us nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals	I	T)	Power supply CV/CC Monit Enable/Disak analog progra Enable/Disak Two open dra Maximum la edge trigge By electrical	y output monion. Open colle ole analog pro amming controle PS output I ole PS output I ain programm ow level inpur: tw=10us n Voltage: 0~0.6	itor. Open coll ector. CC mode ogramming co ogl monitor sig by electrical si by electrical si able signals. I ut voltage = ninimum. Tr,	y: +/-0.5%. lector. Output e: On. CV mod introl by electional. Open colle ignal or dry co ignal or dry co Maximum voll tf=1us Maxir ry contact.	e: Off. Maximi rical signal or ector. Remote: intact. 0~0.6V intact. Remot tage 25V, Max m high leve	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh imum sink cur I input voltac	DV, Maximum emote: 0~0.6 Maximum Vo DV or open. Us nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal	I	T)	Power supply CV/CC Monit Enable/Disak analog progra Enable/Disak Two open dra Maximum la edge trigge By electrical	y output monion. Open colle ole analog pro amming controle PS output I ole PS output I ain programm ow level inpur: tw=10us n Voltage: 0~0.6	itor. Open coll ector. CC mode orgamming co	y: +/-0.5%. lector. Output e: On. CV mod introl by electional. Open colle ignal or dry co ignal or dry co Maximum voll tf=1us Maxir ry contact.	e: Off. Maximi rical signal or ector. Remote: intact. 0~0.6V intact. Remot tage 25V, Max m high leve	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh imum sink cur I input voltac	DV, Maximum emote: 0~0.6 Maximum Vo DV or open. Us nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal	I	T)	Power supply CV/CC Monite Enable/Disab analog progre Enable/Disab Enable/Disab Two open dra Maximum le edge trigge By electrical '4~5V=OK, OV	y output moni or. Open colle ble analog pro amming contr ble PS output I ble PS output I ain programm ow level inpu r: tw=10us n Voltage: 0~0.6	itor. Open collector. CC mode ogramming corol monitor sig by electrical si by electrical si able signals. I ut voltage = ninimum. Tr, 6V/2~30V or d pedance)=Fail	y: +/-0.5%. lector. Output e: On. CV mod ntrol by elect ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu TF=1us Maxir ry contact.	e: Off. Maxim rical signal or ector. Remote: entact. 0~0.6V entact. Remot tage 25V, Max m high leve num, Min de	um Voltage: 3(dry contact. R On. Local: Off. f or short, 2~3(e: 0~0.6V or sh imum sink cui I input voltag elay between	OV, Maximum emote: 0~0.6 Maximum Vo OV or open. Us nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma 2 pulses 1m	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation	I	T)	Power supply CV/CC Monite Enable/Disale analog programe Enable/Disale Enable/Disale Two open dramaximum le edge trigge By electrical '4~5V=OK, OV Possible. Up	y output moni or. Open colle ole analog pro amming contr ole PS output I ole PS output I ole PS output I ain programm ow level inpu rr: tw=10us m Voltage: 0~0.6 (5000hm imp	itor. Open collector. CC mode ogramming co ol monitor sig by electrical si by electrical si hable signals. I ut voltage = ininimum. Tr; 60/2–300 or d pedance)=Fail units in Maste	y: +/-0.5%. lector. Output e: On. CV mod ntrol by electron nal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu Tf=1us Maxir y contact.	e: Off. Maximirical signal or ector. Remote: ontact. 0~0.6v ontact. Remote: agge 25V, Max m high levenum, Min de	um Voltage: 30 dry contact. R On. Local: Off. or short, 2~30 e: 0~0.6V or sh imum sink cur I input voltac	OV, Maximum emote: 0~0.6 Maximum Vo OV or open. Us nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma 2 pulses 1m	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation	I	T)	Power supply CV/CC Monite Enable/Disak analog progre Enable/Disak Two open dra Maximum le edge trigge By electrical' 4~5V=OK, 0V	or output monior. Open collee le analog prore colle le analog prore colle le analog prore collee le samming control le PS output le le PS output le le PS output le lin programmow level in programmow level in programmow level in programmow level in profession (5000 hm improved le lin le li	itor. Open collector. CC mode ogramming co ol monitor sig by electrical si by electrical si able signals. I ut voltage en inimum. Tr, 6V/2–30V or d pedance)=Fail units in Maste its. Refer to ins	y: +/-0.5%. lector. Output e: On. CV mod introl by electi nal. Open colle ignal or dry co ign	e: Off. Maximirical signal or ector. Remote: ontact. 0~0.6v intact. Remot eage 25V, Max m high level num, Min de	um Voltage: 30 dry contact. R On. Local: Off. or short, 2-30 e: 0-0.6V or sh imum sink cur I input voltagelay between	OV, Maximum emote: 0~0.6 Maximum Vo DV or open. U: oort. Local: 2~ rrent 100mA (ge = 2.5V, Ma 2 pulses 1m	Sink Current: V or short. Loc ltage: 30V, Mai ser selectable 30V or open. Shunted by 27 aximum high	10mA. :al: 2~30V or o ximum Sink Cu logic. 'V zener)	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain	I	T)	Power supply CV/CC Monite Enable/Disat analog progre Enable/Disat Enab	y output monior. Open colle le analog pro amming contr ble PS output I ble PS output I bin programm ow level inpur: tw=10us m Voltage: 0~0.6 (500ohm imputo to 4 identical uni es can be con	itor. Open collector. CC mode or gramming co- or oll monitor sig by electrical si by electrical si by electrical si nable signals. I ut voltage = ninimum. Tr, 6V/2~30V or d pedance)=Fail units in Maste ts. Refer to insunected in Dai	y: +/-0.5%. lector. Output e: On. CV mod introl by electi nal. Open colle ignal or dry co Maximum voli and the co Maximum voli and the colle ignal or dry co Maximum voli and the colle ignal or dry co Maximum voli and the colle ignal or dry co Maximum voli and the colle ignal or dry co Maximum voli and the colle ignal or dry co Maximum voli and the colle ignal or dry	e: Off. Maximirical signal or sector. Remote: or nemote: or nemote	um Voltage: 30 dry contact. R On. Local: Off. or short, 2-30 e: 0~0.6V or sh imum sink cut I input voltagelay between uction manua	OV, Maximum emote: 0~0.6 Maximum Vo OV or open. U: nort. Local: 2~ rrent 100mA (ge = 2.5V, Ma 2 pulses 1m	Sink Current: V or short. Loc Itage: 30V, Ma: seelectable sign 30V or open. Shunted by 27 aximum high is.	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) Ievel input =	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control	I	T)	Power supply CV/CC Monits Enable/Disat analog progr. Enable/Disat Enab	y output monior. Open collele analog prorose of the learn and maning controller of the PS output I billion programmow level input: tw=10us moving to 4 identical of the learn and the le	itor. Open collector. CC mode or gramming co rool monitor sig by electrical si by electrical si hable signals. Lut voltage = ut voltage = follower in monitor. Fr. 6V/2~30V or dipedance)=Fail units in Maste its. Refer to insinected in Daio a proggramming control or	y: +/-0.5%. lector. Output e: On. CV mod introl by electi nal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu ff=1us Maxir ry contact. r/Slave mode. struction man sy chain to syr med value. Pro	e: Off. Maximirical signal or sector. Remote: other control of the	um Voltage: 30 dry contact. R On. Local: Off, Or short, 2~3(e) e: 0~0.6V or sh imum sink cui l input voltacelay between uction manua ir turn-on and a the commun	DV, Maximum emote: 0~0.6 Maximum 0.0 Morropen. U: orr. Local: 2~ rrent 100mA (Sink Current: V or short. Loo Itage: 30V, Ma: ser selectable :30V or open. Shunted by 27 aximum high is.	10mA. cal: 2–30V or o ckimum Sink Cu logic. V zener) level input =	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain	I	T)	Power supply CV/CC Monits Enable/Disal analog progr. Enable/Disal Enable/Disal Enable/Disal Two open dr. Maximum le edge trigge By electrical 4–5V=OK, 0V Possible. Up: Possible. Two Power suppli Limits the ou Emulates ser	y output monior. Open collede analog prorection of the provided in the programm of the provided in the programm of the provided in the provide	itor. Open collector. CC mode ogramming co ol monitor sig by electrical si by electrical si by electrical si bable signals. I ut voltage = ninimum. Tr.; 66//2~30V or d pedance)=Fail units in Maste ts. Refer to insi nected in Dai o a proggramr. Resistance ra	y: +/-0.5%. lector. Output e: On. CV mod introl by elect nal. Open colle ignal or dry co daximum volt 0.8V, Minimu tf=1us Maxir ry contact. letruction man sy chain to syr med value. Pro inge: 1~1000r	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6V intact. Remote age 25V, Maximirical signal or sector. Remote age 25V, Maximirical signal sector. Refer to instrual. Refer to instrual. inchronize the agramming yi inΩ. Programming yield.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the cc	JV, Maximum emote: 0~0.6. Maximum Vo yo ro open. Ur inort. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m L. turn-off. iication ports communication	Sink Current: V or short. Loc Itage: 30V, Ma: ser selectable 30V or open. Shunted by 27 aximum high is. or the front p.	10mA. al: 2~30V or o, kimum Sink Cu logic. V zener) level input =	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control	I	T)	Power supply CV/CC Monito Enable/Disat analog progre Enable/Disat Enable/Disat Two open dri Maximum I. Maximum	y output monior. Open collee le analog pro amming controle PS output I lole PS output I lol	itor. Open collector. CC mode ogramming co on monitor sig by electrical si by electrical si by electrical si able signals. I ut voltage en inimum. Tr; 60/2–30V or d pedance)=Fail units in Maste ts. Refer to insinected in Daio a proggramm. Resistance rae and Output f	y: +/-0.5%. lector. Outpute: On. CV mod with old by election al. Open colleting or dry configuration of the confi	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6V intact. Remote age 25V, Maximirical signal or sector. Remote age 25V, Maximirical signal sector. Refer to instrual. Refer to instrual. inchronize the agramming yi inΩ. Programming yield.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the cc	JV, Maximum emote: 0~0.6. Maximum Vo yo ro open. Ur inort. Local: 2~ rent 100mA (Sink Current: V or short. Loo Itage: 30V, Ma: ser selectable :30V or open. Shunted by 27 aximum high is.	10mA. al: 2~30V or o, kimum Sink Cu logic. V zener) level input =	pen. rrent: 10mA.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control	I	T)	Power supply CV/CC Monite Enable/Disal analog progr. Enable/Disal Enab	y output monior. Open collele analog prorose of the learn and ming control of the learn and lear	itor. Open collector. CC mode or gramming corol monitor sig by electrical signable signals. In the collection of the col	y: +/-0.5%. lector. Output e: On. CV mod introl by elect nal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu ff=1us Maxir ry contact. r/Slave mode. struction man sy chain to syr med value. Pro nge: 1~1000r fall slew rate. F	e: Off. Maximirical signal or sector. Remote: other control of the	um Voltage: 30 dry contact. R On. Local: Off, Or short, 2~3(e: 0~0.6V or sh imum sink cui l input voltacelay between uction manua ir turn-on and a the commun ning via the cc range: 0.0001	JV, Maximum emote: 0~0.6 Maximum Vo DV or open. U: ort. Local: 2~ rent 100mA (Sink Current: V or short. Loc Ittage: 30V, Ma: ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: n ports or the l fec. or A/mSec	10mA. cal: 2–30V or o o communication of communication o	pen. rrent: 10mA. = 5V positive
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 6. Slew rate control 7. Arbitrary waveforms	hals	T)	Power supply CV/CC Monite Enable/Disal analog progr. Enable/Disal Enab	y output monior. Open collele analog prorose of the learn and ming control of the learn and lear	itor. Open collector. CC mode or gramming corol monitor sig by electrical signable signals. In the collection of the col	y: +/-0.5%. lector. Output e: On. CV mod introl by elect nal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu ff=1us Maxir ry contact. r/Slave mode. struction man sy chain to syr med value. Pro nge: 1~1000r fall slew rate. F	e: Off. Maximirical signal or sector. Remote: other control of the	um Voltage: 30 dry contact. R On. Local: Off, Or short, 2~3(e: 0~0.6V or sh imum sink cui l input voltacelay between uction manua ir turn-on and a the commun ning via the cc range: 0.0001	JV, Maximum emote: 0~0.6 Maximum Vo DV or open. U: ort. Local: 2~ rent 100mA (Sink Current: V or short. Loc Itage: 30V, Ma: ser selectable 30V or open. Shunted by 27 aximum high is. or the front p.	10mA. cal: 2–30V or o o communication of communication o	pen. rrent: 10mA. = 5V positive
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms	l hals	T)	Power supply CV/CC Monite Enable/Disal analog progr. Enable/Disal Enab	y output monior. Open collele analog prorose of the learn and ming control of the learn and lear	itor. Open collector. CC mode or gramming corol monitor sig by electrical signable signals. In the collection of the col	y: +/-0.5%. lector. Output e: On. CV mod introl by elect nal. Open colle ignal or dry co ignal or dry co Maximum volt 0.8V,Minimu ff=1us Maxir ry contact. r/Slave mode. struction man sy chain to syr med value. Pro nge: 1~1000r fall slew rate. F	e: Off. Maximirical signal or sector. Remote: other control of the	um Voltage: 30 dry contact. R On. Local: Off, Or short, 2~3(e: 0~0.6V or sh imum sink cui l input voltacelay between uction manua ir turn-on and a the commun ning via the cc range: 0.0001	JV, Maximum emote: 0~0.6 Maximum Vo DV or open. U: ort. Local: 2~ rent 100mA (Sink Current: V or short. Loc Ittage: 30V, Ma: ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: n ports or the l fec. or A/mSec	10mA. cal: 2–30V or o o o o o o o o o o o o o o o o o o	pen. rrent: 10mA. = 5V positive
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19)	nals NCK (USB, LAN, 1)(*20) Interfaces)	T)	Power supply CV/CC Monite Enable/Disal analog progr. Enable/Disal Enable/Disal Enable/Disal Two open dr. Maximum Is edge trigge By electrical 4–5V=OK, 0V Possible. Up: Possible. Two Power suppli Limits the ou Emulates ser Programmat communicat Profiles of up	y output monior. Open colle le analog prorace le le analog prorace le le analog prorace le le analog prorace le le Soutput I le PS output I le PS output I le	itor. Open collector. CC mode ogramming co ol monitor sig by electrical si by electrical si by electrical si bable signals. I ut voltage = ninimum. Tr, 60/2~30V or d pedance)=Fail units in Maste its. Refer to insi nected in Dai o a proggramr. Resistance ra e and Output fer front panel	y: +/-0.5%. lector. Outpute: On. CV mod introl by electinal. Open colleignal or dry cognal or dry cognal or dry cognal or dry contact. If Slave mode. Struction man sy chain to syr med value. Profession sy contact. If all slew rate. Fig. 10.4 memory of the memory of	e: Off. Maximirical signal or sector. Remote: intact. 0~0.60 vintact. Remote tage 25V, Max m high levenum, Min de Refer to instrual. Refer to instrual. Remote the gramming yin n.C. Programming or n.C. Programming cells. Activation	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable: 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA. 5V positive g via the front panel.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO CONTROL signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RES232/485, Optional IEEE(*19) 1. Vout programming accuracy (*1	I ACK (USB, LAN, (J*20) Interfaces)		Power supply CV/CC Monite Enable/Disat analog progr. Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Two open dr. Maximum le edge trigge By electrical '1 4–5V=OK, 0V Possible. Up: Possible. Up: Possible. Two Power suppli Limits the ou Emulates ser Programmat communicat Profiles of up: 10 0.05% of rate	output monior. Open colle le analog pro amming controle PS output I lole I	itor. Open collector. CC mode ogramming co on monitor sig by electrical si by electrical si by electrical si able signals. I ut voltage en inimum. Tr, 60/2–30V or dipedance)=Fall units in Maste tts. Refer to insinected in Daio a proggramm. Resistance ra e and Output fine front panel can be stored age.	y: +/-0.5%. lector. Outpute: On. CV mod introl by election al. Open collection and collection al. Open collect	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6 vintact. Remote: intact. Refer to instruual. Intact. Intact. Remote: intact. Refer to instruual. Refer to instruual. Intact. Refer to instruual. Refer to instruutional.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable: 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA. 5V positive g via the front panel.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19) 1. Yout programming accuracy (*1) 2. lout programming accuracy (*1)	I ACK (USB, LAN, (J*20) Interfaces)		Power supply CV/CC Monite Enable/Disals Enab	y output monior. Open colle le analog pro amming controlle PS output I le propresentation of the PS output I le propresentation of the PS output I le le le le PS output I le le PS output I le	itor. Open collector. CC mode orgramming co rool monitor sig by electrical si by electrical si by electrical si by electrical si able signals. I ut voltage = uninimum. Tr, 6V/2~30V or dipedance)=Fail units in Maste its. Refer to insinected in Dai or a proggramm. Resistance ra e and Output fi er front panel can be stored 30 age ent+0.2% of ra	y: +/-0.5%. lector. Outpute: On. CV mod introl by election al. Open collection and collection al. Open collect	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6 vintact. Remote: intact. Refer to instruual. Intact. Intact. Remote: intact. Refer to instruual. Refer to instruual. Intact. Refer to instruual. Refer to instruutional.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA. 5V positive g via the front panel.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19) 1. Vout programming accuracy (*1 2. lout programming accuracy (*1 3. Vout programming accuracy (*1 3. Vout programming resolution	I ACK (USB, LAN, (J*20) Interfaces)		Power supply CV/CC Monit Enable/Disal analog progr. Enable/Disal Enabl	y output monior. Open colle le analog prore collection in the provided provided in the collection in the	itor. Open collector. CC mode ogramming co ool monitor sig by electrical si bable signals. I ut voltage = ininimum. Tr, 6V/2~30V or di pedance)=Fail units in Maste etts. Refer to insinected in Dai o a proggramm. Resistance ra electrical si be stored and Output for front panel can be stored age ent+0.2% of raltage	y: +/-0.5%. lector. Outpute: On. CV mod introl by election al. Open collection and collection al. Open collect	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6 vintact. Remote: intact. Refer to instruual. Intact. Intact. Remote: intact. Refer to instruual. Refer to instruual. Intact. Refer to instruual. Refer to instruutional.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA. 5V positive g via the front panel.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19) 1. Vout programming accuracy (*1 2. Nout programming resolution 4. Iout programming resolution	I ACK (USB, LAN, (J*20) Interfaces)		Power supply CV/CC Monite Enable/Disal analog progr. Enable/Disal Enable/Disal Enable/Disal Enable/Disal Two open dr. Maximum le edge trigge By electrical 4–5V=OK, 0V. Possible. Up ! Possible. Twc Power suppli Limits the ou Emulates ser Programmat communicat Profiles of up 10 0.05% of rate 0.002% of rate 0.002% of rat	y output monior. Open colle le analog prore colle le analog prore colle le analog prore colle le analog prore colle le So output libility of the PS output libility of the PS output libility of the PS output libility of the	itor. Open collector. CC mode ogramming co ol monitor sig by electrical si by electrical si by electrical si bable signals. I ut voltage = ininimum. Tr., 60/2~30V or d pedance)=Fail units in Maste its. Refer to insi nected in Dai: a proggram. Resistance ra e and Output for front panel can be stored 30 age age ent+0.2% of raltage rrent	y: +/-0.5%. lector. Outpute: On. CV mod introl by election al. Open collection and collection al. Open collect	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6 vintact. Remote: intact. Refer to instruual. Intact. Intact. Remote: intact. Refer to instruual. Refer to instruual. Intact. Refer to instruual. Refer to instruutional.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA 5V positive g via the front panel.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_IN/SO CONTROL signal 10. DAISY_IN/SO CONTROL signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RE2323/485, Optional IEEE(*19) 1. Vout programming accuracy (*1) 2. Jout programming resolution 4. Lout programming resolution 5. Vout readback accuracy 1. Vout readback accuracy 1. Vout readback accuracy	I ACK (USB, LAN, (J*20) Interfaces)		Power supply CV/CC Monit Enable/Disat analog progre Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Two open dr: Maximum lye By electrical '1 4-5V=OK, 0V Possible. Up: Possible. Two Power suppli Limits the ou Emulates ser Programmat communicat Profiles of up: 10 0.05% of ractua 0.002% of rat 0.002% of rat 0.002% of rat	output monior. Open colle le analog pro amming controle PS output I le PS output	itor. Open collector. CC mode ogramming co on monitor sig by electrical si by electrical si by electrical si able signals. I ut voltage en inimum. Tr; 60/2–30V or dipedance)=Fail units in Maste tts. Refer to instructed in Daio a proggramm. Resistance ra e and Output fine front panel can be stored age ent+0.2% of ralltage rivent tage.	y: +/-0.5%. lector. Outpute: On. CV mod introl by election al. Open collection and collection al. Open collect	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6 vintact. Remote: intact. Refer to instruual. Intact. Intact. Remote: intact. Refer to instruual. Refer to instruual. Intact. Refer to instruual. Refer to instruutional.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA. 5V positive g via the front panel.
SIGNALS AND CONTROLS (ISOLA 1. Power supply OK #1 signal 2. CV/CC signal 3. LOCAL/REMOTE Analog control 4. LOCAL/REMOTE Analog signal 5. ENABLE/DISABLE signal 6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signal 10. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms PROGRAMMING AND READBA RS232/485, Optional IEEE(*19) 1. Vout programming accuracy (*1 2. Jout programming accuracy (*1 3. Vout programming resolution 4. lout programming resolution 4. lout programming resolution	I ACK (USB, LAN, (CK (USB, LAN, (S)) (S) (S) (S) (S) (S) (S) (S) (S) (Power supply CV/CC Monit Enable/Disat analog progre Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Enable/Disat Two open dr: Maximum lye By electrical '1 4-5V=OK, 0V Possible. Up: Possible. Two Power suppli Limits the ou Emulates ser Programmat communicat Profiles of up: 10 0.05% of ractua 0.002% of rat 0.002% of rat 0.002% of rat	y output monior. Open colle le analog prore colle le analog prore colle le analog prore colle le analog prore colle le So output libility of the PS output libility of the PS output libility of the PS output libility of the	itor. Open collector. CC mode ogramming co on monitor sig by electrical si by electrical si by electrical si able signals. I ut voltage en inimum. Tr; 60/2–30V or dipedance)=Fail units in Maste tts. Refer to instructed in Daio a proggramm. Resistance ra e and Output fine front panel can be stored age ent+0.2% of ralltage rivent tage.	y: +/-0.5%. lector. Outpute: On. CV mod introl by election al. Open collection and collection al. Open collect	e: Off. Maximirical signal or sector. Remote: intact. 0-0.6 vintact. Remote: intact. Refer to instruual. Intact. Intact. Remote: intact. Refer to instruual. Refer to instruual. Intact. Refer to instruual. Refer to instruutional.	um Voltage: 30 dry contact. R On. Local: Off. Or short, 2~30 e: 0~0.69 or shimum sink cut I input voltagelay between uction manua ir turn-on and a the commun ning via the corrange: 0.0001 on by comman	DV, Maximum emote: 0~0.6 Maximum Vo yo ro open. Ur ioror. Local: 2~ rent 100mA (ge = 2.5V, Max 2 pulses 1m l. turn-off. iication ports mmunicatior ~999.99 V/mS d via the com	Sink Current: V or short. Loc Itage: 30V, Ma: Ser selectable 30V or open. Shunted by 27 aximum high is. or the front p: p p ports or the lec. or A/mSec	10mA. al: 2~30V or o kimum Sink Cu logic. V zener) level input = anel. front panel. . Programmin orts or by the	pen. rrent: 10mA. 5V positive g via the front panel.

GENESYS[™] 5kW SERIES SPECIFICATIONS

OUTPUT RATING		G	10-500	20-250	30-170	40-125	50-100	60-85	80-65	100-50	150-34	200-25	300-17	400-13	500-10	600-8.5
1.Rated output voltage(*1)		V	10	20	30	40	50	60	80	100	150	200	300	400	500	600
2.Rated output current (*2)		Α	500 (*3)	250	170	125	100	85	65	50	34	25	17	13	10	8.5
3.Rated output power		W	5000	5000	5100	5000	5000	5100	5200	5000	5100	5000	5100	5200	5000	5100
INPUT CHARACTERISTICS		V	10	20	30	40	50	60	80	100	150	200	300	400	500	600
1.Input voltage/freq. 3 phase, 3 w	vire + Ground (*4)		3-Phase,	400V mod		460Vac, 4	7~63Hz (C	overs 380	/230Vac) 0/400/415V /400/415/4		30Vac)					
2. Maximum Input current at 100% load	3-Phase, 200V models: 3-Phase, 400V models:		17.5A @ 2 9.2A @ 38	200Vac 80Vac												
3.Power Factor (Typ)	3-Phase, 480V models:		9.2A @ 38		, rated ou	tnut nowe	or .									
4.Efficiency (Typ) (*5) (*22)		%	89 (*21)		91	91	90	91	91	91	91	91	92	92	92	92
5.Inrush current (*6)		Α	Less than	50A												
CONSTANT VOLTAGE MODE		٧	10	20	30	40	50	60	80	100	150	200	300	400	500	600
1.Max. Line regulation (*7)				rated out	put voltag	je										
2.Max. Load regulation (*8)			0.01% of	rated out	put voltag	je +5mV										
3.Ripple and noise (p-p, 20MHz)	(*9)	mV	75	75	75	75	75	75	80	90	120	200	200	400	450	480
4.Ripple r.m.s. 5Hz~1MHz (*9)		mV	8	10	12	12	12	12	15	15	20	45	60	80	80	100
5.Temperature coefficient		PPM/°C	50PPM/°	C from rat	ed output	t voltage, i	following	30 minute	es warm-u	p.						
6.Temperature stability			0.01% of	rated Vou	t over 8hr	s interval	following	30 minute	es warm-u	p. Constai	nt line, loa	d & temp.				
7. Warm-up drift			Less than	0.05% of		put voltag	1	ver 30 min	utes follo	wing pow	er on.				1	
8.Remote sense compensation/w	vire (*10)	V	2	2	5	5	5	5	5	5	5	5	5	5	5	5
9.Up-prog. Response time (*11)	- u	mS	30	30	30	30	50	50	50	50	50	50	50	100	100	100
10.Down-prog.response time:	Full load (*11)	mS	50	50	80	80	80	80	100	100	100	100	100	150	200	200
	No load (*12)	mS	300	600	800	900	950	1000	1200	1900	2000	2500	3000	4000	4000	3000
11.Transient response time 12.Start up delay		mS Sec	10~100% Less than	, Local se	nse. Less t	han 1mS,	for model	s up to an	d output fo d includin	g 100V. 2n	nange 10~ nS, for mo	dels abov	re 100V.	it current.	. Output s	et-point:
									60	165	450	200	200	400	F	
CONSTANT CURRENT MODE		V	10	20	30	40	50	60	80	100	150	200	300	400	500	600
1.Max. Line regulation (*7)					put currer											
2.Max. Load regulation (*13) 3.Ripple r.m.s. @ rated voltage. B.	M/ EU = 1MU = (*14)	mA	0.08% or ≤1200		put currer ≤300	nt. ≤150	≤130	≤100	≤70	≤45	≤45	≤45	≤15	≤12	≤10	≤8
5.Temperature coefficient	W 3HZ~1WHZ (*14)	PPM/°C	10V~100	V 100PI	PM/°C fro	m rated o	utput curr	ent, follov	wing 30 m	inutes war	m-up.	_ 545	_ ≥15	<u></u> ≥12	≥10	_ ≥0
6.Temperature stability			0.01% of	rated lout	t over 8hrs	. interval	following	30 minute	ing 30 mir es warm-u	p. Constar	nt line, loa					
7. Warm-up drift									ent over 3 er 30 mini				١.			
ANALOG PROGRAMMING AND N	MONITORING (ISOLATED	FROM T	HE OUTP	UT)												
1.Vout voltage programming			0~100%,	0~5V or 0	~10V, use	r selectab	le. Accura	cy and lin	earity: +/-	0.15% of ra	ited Vout.					
2.lout voltage programming (*15	5)								earity: +/-							
3.Vout resistor programming			0~100%,	0~5/10Ko	hm full sc	ale, user s	electable	. Accuracy	and linea	rity: +/-0.5	5% of rate	d Vout.				
4.lout resistor programming (*15	5)		0~100%,	0~5/10Ko	hm full sc	ale, user s	electable	. Accuracy	and linea	rity: +/-0.5	5% of rate	d lout.				
5.Output voltage monitor			0~5V or 0	0~10V, use	er selectab	ole. Accura	acy: +/-0.5	% of rated	d Vout.							
6.Output current monitor (*15)			0~5V or (0~10V, use	er selectab	ole. Accura	acy: +/-0.5	% of rated	d lout.							
SIGNALS AND CONTROLS (ISOLA	ATED FROM THE OUTPUT	Γ)														
1. Power supply OK #1 signal			Power su	pply outp	out monito	or. Open c	ollector. O	utput On	: On. Outp	ut Off: Off	. Maximui	m Voltage	: 30V, Max	imum Sin	k Current:	10mA.
2. CV/CC signal									ff. Maxim							
3. LOCAL/REMOTE Analog contro	ol		Enable/D	Disable and	alog prog	ramming	control by	electrica	signal or	dry contac	t. Remote	e: 0~0.6V	or short. L	ocal: 2~30	V or open	
4. LOCAL/REMOTE Analog signal	· ·		analog pi	rogrammii	ng control	monitor s	ignal. Ope	n collecto	r. Remote:	On. Local:	Off. Maxir	mum Volta	ige: 30V, N	laximum S	ink Currer	nt: 10mA.
5. ENABLE/DISABLE signal									ct. 0~0.6V							
6. INTERLOCK (ILC) control			Enable/D	isable PS	output by	electrica	l signal or	dry conta	ct. Remot	e: 0~0.6V	or short. L	ocal: 2~30	V or oper	١.		
7. Programmed signals									25V, Max							
8. TRIGGER IN / TRIGGER OUT sign	nals		positive	edge tri	gger: tw=	=10us mii	nimum. T	r,Tf=1us l	nigh level Maximun	input vo n, Min de	Itage = 2 lay betwe	2.5V, Maxi een 2 pul	imum hig ses 1ms.	gh level ir	nput = 5\	
9. DAISY_IN/SO control signal 10. DAISY_OUT/PS_OK #2 signal					ge: 0~0.6V ohm impe			ect.								
FUNCTIONS AND FEATURES																
1. Parallel operation			Possible.	Up to twe	lve (12) id	entical un	its in Mast	er/Slave n	node. Refe	r to instru	ction man	nual. For m	ore powe	r please co	onsult wit	h Factory.
2. Series operation					tical units								. ,	,		
3. Daisy chain			Power su	pplies car	n be conne	ected in D	aisy chain	to synchi	ronize the	ir turn-on	and turn-	off.				
4. Constant power control									mming vi				the front	panel.		
5. Output resistance control									Programn						nel.	
6. Slew rate control								rate. Prog	gramming	range: 0.0	001~999.	99 V/mSed	or A/mS	ec. Progra	mming vi	a the
7. Arbitrary waveforms					orts or the			mory coll-	s. Activation	n hy com	mand vice	the comm	unication	norte or l	ny the free	nt nanol
PROGRAMMING AND READBA	ACK (USB, LAN,	V	10	20	30	40	50	60	80	100	150	200	300	400	500	600
RS232/485, Optional IEEE(*19																
1.Vout programming accuracy (*1 2.lout programming accuracy (*1					put voltag out curren		rated and	nut curre	nt							
3.Vout programming accuracy (*)	1.0)				itput volta		rated out	purcuriel	iii.			-				
4.lout programming resolution					itput curre											
5.Vout readback accuracy					tput volta											
6.lout readback accuracy (*15)					ut current											
7.Vout readback resolution (of rate	ted output voltage)	%	0.011%	0.006%			0.003%	0.002%	0.002%	0.011%	0.007%	0.005%	0.004%	0.003%	0.003%	0.002%
8.lout readback resolution (of rat		%	0.003%	0.005%	0.006%	0.009%	0.011%	0.002%	0.002%	0.003%	0.004%	0.004%	0.006%	0.008%	0.001%	0.002%
				1 55 /5	1 00 /0				102,0			1 5 1,0		1 00 /0	1	

GENESYS™ 2.7kW/3.4kW/5kW SERIES SPECIFICATIONS

Paciback protection Upps	PROTECTIVE FUNCTIONS		٧	10	20	30	40	50	60	80	100	150		200	300	400	500	600
3-0000 3-00000 3-0000 3-0000 3-0000 3-0000 3-0000 3-0000 3-00000 3-0000 3-0000 3-0000 3-0000 3-0000 3-0000 3-00000 3-0000 3-0000 3-00000 3-00000 3-00000 3-00000 3-00000 3-00000 3-00000 3-000000 3-00000 3-00000 3-00000 3-000000 3-0000000 3-0000000 3-0000000000	1.Foldback protection			Output sl User pres	nut-down etable. Re	when pov	wer suppl	y changes r ycle in auto	node from start mod	n CV or Po le, by Pow	wer Limit ver Switch,	to CC m	ode or PUT b	from (utton,	C or Pow	er Limit to nel or by	CV mode	ation.
4. Oper vorbage programming accuracy 5. Distruct under voltage print (UV) 5. Distruct under voltage protection 5. Shuts down the extput. Auto recovery by autotat mode. 7. Output under voltage protection (UVP) 7. Output under voltage protection (UVP) 8. Output under voltage protection (UVP) 9. Output under voltage (UVP) 9. Output under voltage voltag	2.Over-voltage protection (OVP)			Output sl	nut-down													
Soutput under voltage limit (UV)								5-55.125	5~66.15	5~88.2	5~110.25	5~165.	37 5~	220.5	5~330.75	5~441	5~551.25	5~661.5
Source protection																		
2. Output under voltage [mint [UV]		_)								n analog p	orogramm	ing. Pres	set by	front p	anel or co	mmunica	tion port.	
8. Output under voltage protection (UVP) 8. Prevents adjustment of Your below limit. P.S. output turns Off during under voltage condition. Reset by AC input recycle in autostant mode by Power Switch, by OUTPUT button, by tear panel or by communication. FRONT PANEE 1. Control functions 9. Multiple options with 2 Encoders 9. Voutput UVP voltage Limit manual adjust 9. Voutput DNOFF. Front Panel Lock. 9. Voutput DNOFF. Fron		1)							rt mode.									
RONT PANEL FRONT PANEL	7. Output under voltage limit (UV)	L)																
1.0mtrol functions	8. Output under voltage protection	on (UVP)		Prevents mode, by	Power Sw	nt of Vout vitch, by C	below lin	nit. P.S outp utton, by re	ut turns O ar panel o	off during or by comi	under vol municatio	tage cor n.	nditior	n. Reset	by AC in	out recycl	e in autost	tart
Worlfout/Power Limit manual adjust	FRONT PANEL																	
	1.Control functions			Multiple	options w	ith 2 Enco	ders											
Protection Functions - OVP, UNL, UNP, Foldback, OCL, ENA, ILC Communication interface. Communication functions - Selection of LANEEE, RS23, RS485, USB or Optional communication interface. Communication functions - Selection of NA, IEEE, RS23, RS485, USB or Optional communication interface. Communication functions - Selection of NA, IEEE, RS23, RS485, USB or Optional communication interface. Communication functions - Selection of NA, IEEE, RS23, RS485, USB or Optional communication interface. Communication functions - Selection of Na, IEEE, RS23, RS485, USB or Optional communication interface. Communication functions -				Vout/lou	t/Power Li	mit manu	ıal adjust											
Communication Functions - Selection of LANJEEE, R5232, R548, USB or Optional communication interface. Communication Functions - Selection of LANJEEE, R5232, R548, USB or Optional communication interface. Communication Functions - Selection of Baud Rate, Address, IP and communication language. Communication Functions - Selection of Baud Rate, Address, IP and communication language. Analog Kontrol Functions - Selection of Voltage/Current Monitoring SV10V, SK/10K programming Analog Monitor Functions - Selection of Voltage/Current Monitoring SV10V.																		
Communication Functions - Selection of Baud Rate, Address, IP and communication Inguage.								of LAN,IEEE	,RS232,RS	485,USB	or Optiona	al comm	unicat	tion int	erface.			
Analog Control Functions - Selection Voltage/Crist tive programming, 5V/10V, 5K/10K programming								-f Dl D-4		- 10 1								
Analog Monitor Functions - Selection of Voltage/Current Monitoring SV10V.																		
2.Display Vout.4 digits, accuracy. 0.05% of fated output voltage +/1 count. Incident A digits, accuracy. 0.05% of fated output voltage +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits, accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output ucreent +/1 count. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. Incident A digits accuracy. 0.05% of fated output voltage. 0.05% of fated output volta			_									ok/ luk p	rograi	mming				
Seront Panel Buttons Indications	2 Display										J V/ 10 V.							
A. Front Panel Buttons Indications	2.5.15piay																	
4. Front Panel Display Indications	3.Front Panel Buttons Indications	-									N,CONFIGI	URATION	N, SYST	ΓΕΜ, SE	QUENCE	₹.		
1.0perating temperature	4. Front Panel Display Indications			Voltage, (Current, Polication), F	ower, CV, (RS/USB/LA	CC, CP, Ext	ternal Volta mmunicati	ge, Extern on, Trigge	nal Curren er, Load/S	nt, Address tore Cell.	s, LFP, Au	itostar	t, Safet	start, Fol	dback V/I,	Remote	
1.0perating temperature	ENVIRONMENTAL CONDITIONS																	
2.Storage temperature			l	0~50°C 1	00% load													
3.Operating humidity	<u> </u>							-	-	-								
4. Storage humidity						donestio	m)											
S.Altitude (*17) Operating: 10000ft (3000m), output current derating 2%/100m or Ta derating 1°C/100m above 2000m. Non operating: 40000ft (12000m). MECHANICAL				_						-	_						-	
MECHANICAL 1.Cooling	,																	
1.Cooling Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear	5.Altitude (*1/)			Operating	g: 10000ft	(3000m),	output cu	rrent derat	ing 2%/10	0m or Ta	derating 1	°C/100m	above	e 2000r	n. Non op	erating: 4	0000ft (12	(000m).
2. Weight	MECHANICAL																	
3.Dimensions (WxHxD) mm W: 423, H: 43.6, D: 441.5 (Without busbars and busbars cover), (Refer to Outline drawing). 4.Vibration	1.Cooling			Forced ai	r cooling l	oy interna	l fans. Air	flow direct	ion: from f	ront pan	el to powe	er supply	/ rear					
W: 423, H: 43.6, D: 553.2 (Including busbars and busbars cover) (Refer to Outline drawing). 4Vibration	2.Weight		kg	2.7kW/3.4	1kW - Less	than 6.25	ikg.			5kW - Le	ess than 7.5	5kg.						
SAFETY/EMC SAFETY/EMC Safety Sa	3.Dimensions (WxHxD)		mm	W: 423, W: 423,	H: 43.6, [H: 43.6, [): 441.5 (\): 553.2 (\	Without Including	busbars ar g busbars a	nd busba and busb	rs cover) ars cove	r) (Refer t	to Outlin	ne dra	awing)				
SAFETY/EMC 1.Applicable standards: Safety UL61010-1, CSA22.2 No.61010-1, IEC61010-1, EN61010-1. 1.1. Interface classification Vout≤50V Models: Output, J1, J2, J3, J4, J5, J6, J7, J8 (sense) & J9 (communication options) are Non Hazardous. 60≤Vout≤60V Models: Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options) are Non Hazardous. Vout≤50V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 60V≤Vout≤10V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 1.2 Withstand voltage Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 1.3 Insulation resistance Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min. 1.3 Insulation resistance I00Mohm at 25°C, 70%RH. Output to Ground 500VDC 2.Conducted emmision IEC/EN61204-3 Industrial environment, Annex H table H.1, FCC Part 15-A, VCCI-A. 3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A	4.Vibration			MIL-810G	, method	514.6, Pro	cedure I, t	test conditi	on Annex	C - 2.1.3.1								
1.Applicable standards: Safety UL61010-1, CSA22.2 No.61010-1, EN61010-1. 1.1. Interface classification Vouts50V Models: Output, J1, J2, J3, J4, J5, J6, J7, J8 (sense) & J9 (communication options) are Non Hazardous. 60≤Vouts600V Models: Output & J8 (sense) are Hazardous, J1, J2, J3, J4, J5, J6, J7 & J9 (communication options) are Non Hazardous. Vouts50V Models: Input - Output & J8 (sense) are Hazardous, J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 60V≤Vouts100V Models: Input - Output & J8 (sense), J1, J2, J3, J3, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - Ground: 1500VDC 1min, Input - Ground: 2835VDC 1min. 1.2 Withstand voltage Vouts600V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min. 1.3 Insulation resistance Voutput & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 1275VDC 1min. 1.3 Insulation resistance Voutput & J8 (sense) - Ground: 2500VDC 1min. 1.3 Insulation resistance Voutput & J8 (sense) - Ground: 2500VDC 2.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) Voutput & J8 (sens	5.Shock			Less than	20G, half	sine, 11m	Sec. Unit i	s unpacked	i.									
1.Applicable standards: Safety UL61010-1, CSA22.2 No.61010-1, EN61010-1. 1.1. Interface classification Vouts50V Models: Output, J1, J2, J3, J4, J5, J6, J7, J8 (sense) & J9 (communication options) are Non Hazardous. 60≤Vouts600V Models: Output & J8 (sense) are Hazardous, J1, J2, J3, J4, J5, J6, J7 & J9 (communication options) are Non Hazardous. Vouts50V Models: Input - Output & J8 (sense) are Hazardous, J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 60V≤Vouts100V Models: Input - Output & J8 (sense), J1, J2, J3, J3, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - Ground: 1500VDC 1min, Input - Ground: 2835VDC 1min. 1.2 Withstand voltage Vouts600V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min. 1.3 Insulation resistance Voutput & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 1275VDC 1min. 1.3 Insulation resistance Voutput & J8 (sense) - Ground: 2500VDC 1min. 1.3 Insulation resistance Voutput & J8 (sense) - Ground: 2500VDC 2.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) - Ground: 2500VDC 1.Conducted emmision Voutput & J8 (sense) Voutput & J8 (sens	CAFETY/ENG																	
1.1. Interface classification		Cafoty	Ι	LII 61010	1 (5) 22 1	No 61010	n 1 IEC610	110 1 EN61	010 1									
60sVouts600V Models: Output & J8 (sense) are hazardous, J1, J2, J3, J4, J5, J6, J7 & J9 (communication options) are Non Hazardous. Vouts50V Models: Input – Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 60VsVouts100V Models: Input – Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - Ground: 1500VDC 1min, Input - Ground: 2835VDC 1min. 100VsVouts600V Models: Input – Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min. Output & J8 (sense) - Ground: 2500VDC 1min. Input - Ground: 2835VDC 1min. 1.3 Insulation resistance	1.Applicable standards:	Salety								2 10 /50 m	municatio	n ontion	101 250	Non H				
Input - Ground: 2835VDC 1min. 60V≤Vout≤100V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min. 0utput & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 850VDC 1min. 0utput & J8 (sense) - Ground: 1500VDC 1min, Input - Ground: 2835VDC 1min. 100V 1.2 Withstand voltage	1.1. Interface classification			60≤Vouts	≤600V Mo	dels: Outp	out & J8 (s	ense) are ha	azardous,	J1, J2, J3, .	J4, J5, J6, J	17 & J9 (c	ommu	ınicatio	n options	are Non		is.
2.Conducted emmision IEC/EN61204-3 Industrial environment, Annex H table H.1 , FCC Part 15-A, VCCI-A. 3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A	1.2 Withstand voltage			Input - G 60V≤Vou Output & Output & 100V <vo Output & Output &</vo 	round: 28 ut≤100V N J8 (sens J8 (sens out≤600V J8 (sens J8 (sens	335VDC 1 Models: Ir ie) - J1, J3 ie) - Grou Models: I ie) - J1, J3 ie) - Grou	1min. 1put – Ou 2, J3, J4, 1nd: 1500 Input – O 2, J3, J4, 1nd: 2500	tput & J8 (J5, J6, J7 VDC 1min, utput & J8 J5, J6, J7	sense), J & J9 (con Input - G (sense), c & J9 (con	1, J2, J3, nmunica iround: 2 J1, J2, J3	J4, J5, Jo tion option 835VDC 1, J4, J5, J	6, J7 & ons): 850 1min. J6, J7 ar	J9 (co)VDC nd J9 (mmun 1min. (comm	ication o	otions): 4	242VDC 1	
3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A	1.3 Insulation resistance			100Mohn	n at 25°C,	70%RH. C	output to	Ground 50	0VDC									
3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A	2.Conducted emmision			IEC/EN61	204-3 Indi	ustrial env	/ironment	, Annex H t	able H.1 , I	FCC Part 1	15-A, VCCI-	-A.						
				_									·A					
	4. EMC compliance	EMC(*18)																

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0° to 50° C.

NOTES:

- NOTES:

 * 1: Minimum voltage is guaranteed to maximum 0.1% of rated output voltage.

 * 2: Minimum current is guaranteed to maximum 0.2% of rated output current.

 * 3: G5KW: Derate 5A/1°C above 40°C

 * 4: For cases where conformance to various safety standards (UL, IEC, etc...) is required, to be described as 190-240Vac (50/60Hz) for 3-Phase

 * 5: 3-Phase 200V models: At 200Vac input voltage, 3-Phase 400/480V: At 380Vac input voltage. With rated output power.

 * 6: Not including EMI filter inrush current, less than 0.2mSec.

 * 7: 3-Phase 200V models: 170-265Vac, 3-Phase 400V models: 342-460Vac, 3-Phase 480V models: 342-528Vac. Constant load.

 * 8: From No-Load to Full-Load, constant input voltage. Measured at the sensing point in Remote Sense.

 * 9: For 10V-150V models: Measured with JETA RC-9131C (1:1) probe. For 200~600V model: Measured with 100:1 probe.

 * 10: The maximum voltage on the power supply terminals must not exceed the rated voltage.

 * 11: From 10% to 90% or 90% to 10% of Rated Output Voltage, with rated, resistive load.

 * 12: From 90% to 10% of Rated Output Voltage.

 * 14: For 10V model, the ripple is measured at 20-100% of rated output voltage and rated output current. For other models, the ripple is measured at 10~100% of rated output voltage and rated output current programming, readback and monitoring accuracy do not include the warm-up and Load regulation thermal drift.

 * 16: Measured at the sensing point.

 * 17: For 10V model Ta derating 2°C/100m.

 * 18 Signal and control ports interface cables length: Less than 3m, DC output power port cables length: Less than 30m.

 * 19 Max. ambient temperature for using IEEE is 40°C.

 * 20 For 10V model only: Max. output current for using IEEE is 400A up to 40°C and 450A up to 30°C.

 * 21: For 10V model only: Nax. output current for using IEEE is 400A up to 40°C and 450A up to 30°C.

 * 22: Typ. at Ta=25°C, rated output power.

GENESYS[™] **GSP10kW SERIES SPECIFICATIONS**

State of country country State S	OUTPUT RATING		GSP	10-1000	20-500	30-340	40-250	50-200	60-170	80-130	100-100	150-68	200-50	300-34	400-26	500-20	600-17
Marrie Create Charge 19	1.Rated output voltage(*1)												_				
Page 10 20 20 30 40 50 50 50 50 50 50 5	2.Rated output current (*2)		Α	1000 (*3)	500	340	250	200	170	130	100	68	50	34	26	20	17
Primer, 2007 models	3.Rated output power		kW	10	10	10.2	10	10	10.2	10.4	10	10.2	10	10.2	10.4	10	10.2
Physics (2007 mode) 20-46 (2007 mode) 20	INPUT CHARACTERISTICS		٧	10	20	30	40	50	60	80	100	150	200	300	400	500	600
Plaza 280 models 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,				3-Phase,	200V mod	els: 170~2	65Vac, 47	~63Hz (Co	vers 200/2	230Vac)							
MARIE 1979 1972	1.Input voltage/freq. 3 phase, 3 w	ire + Ground (*4)		3-Phase,	100V mod	lels: 342~4	160Vac, 47	~63Hz (Co	vers 380/	400/415V	ac)						
3-Plases (400 mode) 3-Plases (400 mode) 3-Plases (400 mode) 1-Plases (400 mode)				3-Phase,	180V mod	els: 342~5	28Vac, 47	~63Hz (Co	vers 380/4	100/415/4	10/460/480	OVac)					
1908 Color Prints Service Prints Service Prints Service Prints Service Prints Service Serv	2 Maximum Input surrent at			35A @ 20)Vac												
\$1.44.6 \$0.9000 \$1.0																	
A September		3-Phase, 480V models:															
Sharped control (**) Color Stant VOLAGE MODE V 10 20 30 40 30 60 100 150 100 300 400 300 600			_														
Max. Line regulation (**?)	4.Efficiency (Typ) (*5) (*22)		%			91	91	91	91	91	91	91	91	92	92	91	92
Constraint Vol. 146 Mode 30 40 30 40 30 60 80 100 150 200 300 400 300 600 400					100A												
Max. Lose regulation (?)	6.AC line phase imbalance		%	< 5%													
Max. Lose regulation (?)	CONSTANT VOLTAGE MODE		V	10	20	30	40	50	60	80	100	150	200	300	400	500	600
2.80x. Lard epigation (**9)	1.Max. Line regulation (*7)			0.01% of r	ated outr	ut voltag	e										
Simple continue Con	2.Max. Load regulation (*8)			0.01% of r	ated outp	out voltag	e +5mV										
Stemperature scellforest Semperature scell fooling 30 minutes were up. Contact line, load & temps.	3.Ripple and noise (p-p, 20MHz)	(*9)	mV	75	75	75	75	75	75	80	90	120	200	200	400	450	480
Stemperature scellforest Semperature scell fooling 30 minutes were up. Contact line, load & temps.	4.Ripple r.m.s. 5Hz~1MHz (*9)		mV	8	10	12	12	12	12	15	15	20	45	60	80	80	100
Comparative stability	5.Temperature coefficient		PPM/°C	50PPM/°C	from rate	ed output	voltage, fo	ollowing 3	30 minutes	warm-up).						
Bemote series compensation/wire **10	6.Temperature stability											t line, load	d & temp.				
Bemote series compensation/wire **10	7. Warm-up drift																
Supplementary File Leader City Leade		ire (*10)	٧						T				5	5	5	5	5
100,000 100,	9.Up-prog. Response time (*11)		mS	30	30	30	30	50	50	50	50	50		50	100	100	100
Industrial response time	10 Dawn progress	Full load (*11)	mS	50	50	80	80	80	80	100	100	100	100	100	150	200	200
10-109K, Local series. Less than 7 ins., for models up to and including 100V, 2m.5, for models above 100V.	10.Down-prog.response time:		mS	300	600	800	900	950	1000	1200	1900	2000	2500	3000	4000	4000	3000
10-10%, See a least han 7-See See a least han 7-Se	11 Transient response time	,	mc	Time for o	output vo	tage to re	cover with	nin 0.5% o	fits rated	output fo	r a load ch	ange 10~	90% of rat	ed output	current. C	utput set	-point:
Mass. Line regulation (**?)	· .			10~100%	Local ser	se. Less tl	nan 1mS, f	or models	up to and	lincluding	100V. 2m	S, for mod	dels above	100V.			
Max. Lond regulation	12.Start up delay		Sec	Less than	7 Sec												
Max. Lond regulation	CONSTANT CURRENT MODE																
2.0 Also Load regulation (**13)				0.05% of	ated outr	out curren	t										
3.8 18 18 18 18 18 18 18																	
Apple Mar. 100 70 30 150 100 75 50 35 23 23 75 75 8 6		ie. B.W 5Hz~1MHz. (*14)	mA					200	150	100	70	45	45	15	15	12	10
3.1 3.2										_	_				-		-
Silv-Bopt Variable Silv-Bopt Silv-Bo					100PF					ing 30 mii	nutes warn						
6. Femperature stability	5.Temperature coefficient		PPM/°C	150V~600													
10V-100V model: Less than +/0.25% of rated output current over 30 minutes following power on.	6.Temperature stability				01% of rated lout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature.												
ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT)																	
1.10out voltage programming	7. Warm-up drift																
1.10out voltage programming	ANALOG PROCRAMMING AND A	AONITODING (ISOLATED	EDOM T	HE OLITPI	IT\												
2-100 with sape programming (**15)		IONITORING (ISOLATED				10\/	coloctable		u and line	avitan I / O	150/ of rot	ad Vaut					
-0-10%, 0-5/10/Kohm full scale, user selectable. Accuracy and linearity; +/-0.5% of rated Vout.		1															
4-1001 4)											l \/o.ut				
5. Output voltage monitor 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated Vout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. Accuracy: +/-0.5%. Of rated lout. 0-5V or 0-10V, user selectable. 0-5V		١															
5.00)									ity: +/-0.5%	o or rated	i iout.				
SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 1. Power supply) OK #1 signal	<u> </u>													-			-
1. Power supply OK #1 signal				024.01.0	10 v, use	1 Selectab	ie. Accura	Cy. +/-0.5/	o. Orrated	i lout.							
2. CV/CC Monitor. Open collector. CC mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA.	SIGNALS AND CONTROLS (ISOLA	ATED FROM THE OUTPUT	Γ)														
Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.																Current: 1	0mA.
4. LOCAL/REMOTE Analog signal 5. ENABLE gignal 6. Enable/Disable P5 output by electrical signal or dry contact. 00.6V or short, 2-30V or open. User selectable logic. 6. INTERLOCK (ILC) control 7. Programmed signals 7. Two open drain programmable signals Maximum voltage 25V, Maximum sink current 10mA. 7. Programmed signals 7. Two open drain programmable signals. Maximum voltage 25V, Maximum sink current 10mA (Shunted by 27V zener) 8. TRIGGER IN / TRIGGER OUT signals 9. DAISY_IN/SO control signal 9. DAISY_OUT/PS_OK 42 signal 9. DAISY_OUT/PS_OK 42 signal 9. Possible. Up to four (4) identical GSP units. For more power please consult with Factory. 9. Series operation 9. Possible. Up to four (4) identical GSP units. For more power please consult with Factory. 9. Daisy_thain 1. Constant power control 1. Limits the output power to a proggrammed value. Programming via the communication ports or the front panel. 9. Emulates series resistance. Resistance range: 1-1000mΩ. Programming via the communication ports or the front panel. 9. Emulates series resistance. Resistance range: 1-1000mΩ. Programming via the communication ports or the front panel. 9. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 9. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 9. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 9. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 9. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or the front panel. 9. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or the front panel. 9. O.05% of rated output current 9. O.05% of rated output current 9. O.0	2. CV/CC signal																
Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic.		<u> </u>															
6. INTERLOCK (ILC) control 7. Programmed signals 8. TRIGGER IN / TRIGGER OUT signals 8. TRIGGER IN / TRIGGER OUT signals 8. TRIGGER IN / TRIGGER OUT signals 9. DAISY_IN/SO control signal 9. DAISY_IN/SO control signal 9. DAISY_IN/SO control signal 9. DAISY_IN/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. DAISY_IN/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. DAISY_IN/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. DAISY_IN/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Deversion Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Deversion Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Daisy_In/SO control Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Deversion Signal 9. Spectrical Voltage: 0-0.6V/2-30V or dry contact. 9. Deversion Signal 9. Deversion														-		ink Currer	nt: 10mA.
7. Programmed signals	5. ENABLE/DISABLE signal																
8. TRIGGER IN / TRIGGER OUT signals Maximum low level input voltage = 0.8V, Minimum high level input voltage = 2.5V, Maximum high level input = 5V positive edge trigger: tw=10us minimum. Tr, ff=1 uss Maximum, Min delay between 2 pulses 1 ms. 9. DAISY_IN/SO control signal By electrical Voltage: 0-0.6V/Z-30V or dry contact. 10. DAISY_OUT/PS_OK #2 signal 4-5V=OK, OV (5000hm impedance)=Fail FUNCTIONS AND FEATURES 1. Parallel operation Possible. Up to four (4) identical GSP units. For more power please consult with Factory. 2. Series operation 3. Daisy chain Power supplies can be connected in Daisy chain to synchronize their turn-on and turn-off. 4. Constant power control Limits the output power to a proggrammed value. Programming via the communication ports or the front panel. 5. Output resistance control 6. Slew rate control 6. Slew rate control 7. Arbitrary waveforms 7. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 7. Arbitrary waveforms 7. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 8. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 8. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 8. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 8. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 8. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 8. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel																	
edge trigger: tw=10us minimum. Tr,Tf=1us Maximum, Min delay between 2 pulses 1ms.	/. Programmed signals	,		<u> </u>													1.1
9. DAISY_IN/SO control signal	8. TRIGGER IN / TRIGGER OUT sign	nals												num higl	n Ievel inp	out = 5V p	positive
10. DAISY_OUT/PS_OK #2 signal										, wiiii del	ay betwe	cii z pul	JCJ 11115.				
FUNCTIONS AND FEATURES 1. Parallel operation 2. Series operation 3. Daisy chain 4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms 7. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 7. Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. 7. Arbitrary waveforms 7. Output resistance cancer(*15) 7. Output power on a programming via the communication ports or the front panel. 7. Arbitrary waveforms 7. Output power on a programming via the communication ports or the front panel. 7. Arbitrary waveforms 7. Output power on a programming via the communication ports or the front panel. 7. Arbitrary waveforms 7. Output power on the front panel. 7. Arbitrary waveforms 7. Output power on the front panel by the front panel by the front panel. 8. Output power on the front panel by the front panel. 8. Output power on the front panel by the fro				-					ct.								
1. Parallel operation				I T-JV=UK	, 0 0 (3000	ninpe	aarice/=Fd										
2. Series operation	FUNCTIONS AND FEATURES																
3. Daisy chain	<u> </u>						cal GSP un	its. For m	ore power	please co	nsult with	Factory.					
4. Constant power control 5. Output resistance control 6. Slew rate control 7. Arbitrary waveforms Programmable Output rise and Output fall slew rate. Programming via the communication ports or the front panel. Programmable Output rise and Output fall slew rate. Programming range: 0.0001~999.99 V/mSec. or A/mSec. Programming via the communication ports or the front panel. 7. Arbitrary waveforms Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel. PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*19)(*20) Interfaces) 1. Vu 10 20 30 40 50 60 80 100 150 200 300 400 500 600 1. Vout programming accuracy (*16) 2. Jour programming accuracy (*15) 3. Vout programming resolution	2. Series operation																
5. Output resistance control	3. Daisy chain																
6. Slew rate control	4. Constant power control																
Communication ports or the front panel.	5. Output resistance control																
Communication ports or the Front panel.	6. Slew rate control			Programm	nable Out	put rise a	nd Output	fall slew r	rate. Progr	amming r	ange: 0.00	01~999.9	9 V/mSec.	or A/mSe	c. Program	ming via	the
PROGRAMMING AND READBACK (USB, LAN, R5232/485, Optional IEEE (*19)(*20) Interfaces) V 10 20 30 40 50 60 80 100 150 200 300 400 500 600 1. Vout programming accuracy (*16)										A .: .:		1.1.4					
R5232/485, Optional IEEE (*19)(*20) Interfaces) V 10 20 30 40 50 60 60 100 100 100 20 300 400 300 400 300 600 1100 100 200 300 400 300 600 1100 100 100 200 300 400 300 600 1100 100 100 200 300 400 300 600 600 600 600 600 600 600 600 6	/. AIDILIATY WAVETORMS		r ronnes o	up (0 10	o steps cal	i ne storec	u III 4 men	nory cens.	ACTIVATIO	i by comm	iaiiu Via t	ne commi	arrication	טונג פר מע	me front	pariel.	
Nout programming accuracy (*15) Nout readback accuracy (*15) Nout readback resolution (of rated output voltage Noutput current Noutprogramming accuracy (*15) Noutprogramming resolution Noutput voltage					20	30	40	50	60	80	100	150	200	300	400	500	600
2.lout programming accuracy (*15) 0.3% of rated output current 3.Vout programming resolution 0.002% of rated output voltage 4.lout programming resolution 0.002% of rated output current 5.Vout readback accuracy (*15) 0.2% of rated output voltage 6.lout readback accuracy (*15) 0.2% of rated output voltage 7.Vout readback resolution (of rated output voltage) 8. 0.011% 0.006% 0.004% 0.003% 0.003% 0.002% 0.002% 0.011% 0.007% 0.005% 0.004% 0.003% 0.003% 0.002%	PROGRAMMING AND READBACH	((USB, LAN,		10	20												
3.Vout programming resolution 0.002% of rated output voltage 4.lout programming resolution 0.002% of rated output current 5.Vout readback accuracy (*15) 0.2% of rated output voltage 7.Vout readback resolution (of rated output voltage) 0.01% 0.006% 0.004% 0.003% 0.003% 0.003% 0.002% 0.011% 0.007% 0.005% 0.004% 0.003% 0.003% 0.002% 0.002% 0.005% 0.005% 0.005% 0.005% 0.003% 0.003% 0.002% 0.005% 0.00	RS232/485, Optional IEEE (*19)(*20) Interfaces)	٧											300	400		
4.lout programming resolution 0.002% of rated output current 5.Vout readback accuracy (*15) 0.2% of rated output current 7.Vout readback resolution (of rated output voltage) % 0.011% 0.006% 0.004% 0.003% 0.003% 0.003% 0.002% 0.011% 0.007% 0.005% 0.004% 0.003% 0.003% 0.003% 0.002%	RS232/485, Optional IEEE (*19)(1.Vout programming accuracy (*1	*20) Interfaces) 6)	V 	0.05% of	ated outp									300	100		
5.Vout readback accuracy 6.lout readback accuracy (*15) 0.2% of rated output voltage 0.2% of rated output current 7.Vout readback resolution (of rated output voltage) % 0.011% 0.006% 0.004% 0.003% 0.003% 0.003% 0.002% 0.011% 0.007% 0.007% 0.005% 0.004% 0.003% 0.003% 0.003% 0.002%	RS232/485, Optional IEEE (*19)(1.Vout programming accuracy (*1 2.lout programming accuracy (*1	*20) Interfaces) 6)	V	0.05% of r	ated outp	ut current								300	400		
6.lout readback accuracy (*15) 0.2% of rated output vortent 7.Vout readback resolution (of rated output voltage) % 0.011% 0.006% 0.004% 0.003% 0.003% 0.003% 0.002% 0.011% 0.007% 0.007% 0.005% 0.004% 0.003% 0.003% 0.002%	RS232/485, Optional IEEE (*19)(1.Vout programming accuracy (*1 2.lout programming accuracy (*1 3.Vout programming resolution	*20) Interfaces) 6)	V	0.05% of ra 0.3% of ra 0.002% of	ated outp	ut current tput volta	ge							300	400		
7.Vout readback resolution (of rated output voltage)	RS232/485, Optional IEEE (*19)(*1.Vout programming accuracy (*1.2.lout programming accuracy (*1.3.Vout programming resolution 4.lout programming resolution	*20) Interfaces) 6)	V	0.05% of ra 0.3% of ra 0.002% of 0.002% of	rated outported	ut current tput volta tput curre	ge nt							300	400		
	RS232/485, Optional IEEE (*19)(* 1.Vout programming accuracy (*1 2.lout programming accuracy (*1 3.Vout programming resolution 4.lout programming resolution 5.Vout readback accuracy	*20) Interfaces) 6)	 	0.05% of r 0.3% of ra 0.002% of 0.002% of 0.05% of	rated outported	ut current tput volta tput curre put voltac	ge nt							300	400		
o.ioutreaubackresolution (or rated output currenti) אין אין פאר אין אין פאר	RS232/485, Optional IEEE (*19)(*) 1.Vout programming accuracy (*) 2.lout programming accuracy (*) 3.Vout programming resolution 4.lout programming resolution 5.Vout readback accuracy 6.lout readback accuracy (*15)	*20) Interfaces) 6) 5)	 	0.05% of ra 0.3% of ra 0.002% of 0.002% of 0.05% of 0.2% of ra	rated outported	ut current tput volta tput curre put voltac ut current	ge nt je	0.0022/	0.0022/		0.0330/	0.0070				0.0020	0.0000
	RS232/485, Optional IEEE (*19)(1.Vout programming accuracy (*1 2.lout programming accuracy (*1 3.Vout programming resolution 4.lout programming resolution 5.Vout readback accuracy 6.lout readback accuracy (*15) 7.Vout readback resolution (of rat	*20) Interfaces) 6) 5) ted output voltage)	V	0.05% of r 0.3% of ra 0.002% of 0.002% of 0.05% of 0.2% of ra 0.011%	rated outported	ut current tput volta tput curre put voltag ut current 0.004%	ge nt je			0.002%			0.005%	0.004%	0.003%		

GENESYS[™] **GSP15kW SERIES SPECIFICATIONS**

Rated output voltage(**)	91 92 500 600 91 92 500 600 450 480 80 100 5 5 5 100 100 4000 300 utput set-point
New 15 15 15 15 15 15 15 1	91 92 500 600 450 480 80 100 5 5 5 100 100 200 200 4000 300
INPUT CHARACTERISTICS	91 92 500 600 450 480 80 100 5 5 5 100 100 200 200 4000 300
3-Phase, 200V models: 12-92-58/18c, 47-6318 (Covers 380)400/415/440/480/480/45/25 3-Phase, 400V models: 32-938/46, 47-6318 (Covers 380)400/415/440/480/480/45/25 3-Phase, 400V models: 32-938/46, 47-6318 (Covers 380)400/415/440/480/480/45/25 3-Phase, 400V models: 3-Phase, 400V mo	91 92 500 600 450 480 80 100 5 5 5 100 100 200 200 4000 300
1.Input voltage/freq. 3 phase, 3 wire + Ground (*4)	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
Springer and notice (pr.) 20MHz (1975) Springer and notice (pr.) 20MHz (19	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
2. Maximum Input current at 10% load 3. Phase, 400V models: 25.6 & 2.00Vac 27.6 & 2.8 Balvac 27.6 Balvac	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
2. Maximum Input current at 3. Phase, 480V models: 1. Co. 25.6 @ 380Vac 27.6 @ 38.6 @	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
3-Phase, 480V models 3-Phase, 380V models	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
3.70 3.70	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
A	500 600 450 480 80 100 5 5 100 100 200 200 4000 300
Section Sect	450 480 80 100 5 5 5 100 100 200 200 4000 300
CONSTANT VOLTAGE MODE	450 480 80 100 5 5 5 100 100 200 200 4000 300
LMax. Line regulation (°7)	450 480 80 100 5 5 5 100 100 200 200 4000 300
Date	5 5 100 100 200 200 4000 300
Skipple and noise (p-p. 20MHz) (**9)	5 5 100 100 200 200 4000 300
ARipple r.m.s. 5Hz-1MHz (*9)	5 5 100 100 200 200 4000 300
Stemperature coefficient	5 5 100 100 200 200 4000 300
Comparative stability	100 100 200 200 4000 300
Remote sense compensation/wire (*10)	100 100 200 200 4000 300
Remote sense compensation/wire (*10)	100 100 200 200 4000 300
Sup-prog.Response time (*11)	100 100 200 200 4000 300
10.Down-prog.response time: Full load (*11) mS 50 50 80 80 80 80 100 100 100 100 100 100 150 100 100 110	200 200 4000 300
10.Down-prog.response time: No load (*12) ms 300 600 800 900 950 1000 1200 1900 2000 2500 3000 4000 11.Transient response time ms Time for output voltage to recover within 0.5% of its rated output for a load change 10-99% of rated output current. Out 10-100%, Local sense, Less than 1ms, for models up to and including 100V. 2ms, for models above 100V. 12.Start up delay Sec Less than 7 Sec CONSTANT CURRENT MODE V 10 20 30 40 50 60 80 100 150 200 300 400 1.Max. Line regulation (*13) 0.05% of rated output current.	4000 300
11.Transient response time	
12. Start up delay Sec Less than 7 Sec Less than 1mS, for models up to and including 100V. 2mS, for models above 100V.	utput set-point
12Start up delay Sec Less than 7 Sec	
CONSTANT CURRENT MODE	
1.Max. Line regulation (*77)	F00
2.Max. Load regulation (*13) 3.Ripple r.m.s. @ 109% rated voltage B.W 5Hz~1MHz. (*14) MA 2000 1200 600 300 250 180 100 70 45 45 15 15 4.Ripple r.m.s. @ 109% rated voltage. B.W 5Hz~1MHz. (TA 25°C) MA 1200 700 300 150 130 90 60 35 23 23 23 7.5 7.5 5.Temperature coefficient PPM/*C 6.Temperature stability	500 600
3.Ripple r.m.s.	
4.Ripple r.m.s. @ 100% rated voltage. B.W SHz~1MHz. (TA 25°C) mA 1200 700 300 150 130 90 60 35 23 23 7.5 7.5 10V~100V 100PPM/°C from rated output current, following 30 minutes warm-up. 5.Temperature coefficient PPM/°C 6.Temperature stability	12 10
5.Temperature coefficient PPM°C 10V~100V 100PPM/°C from rated output current, following 30 minutes warm-up. 150V~600V 70PPM/°C from rated output current, following 30 minutes warm-up. 0.01% of rated lout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature. 10V~100V model: Less than +/-0.25% of rated output current over 30 minutes following power on. 150V~600V: Less than +/-0.15% of rated output current over 30 minutes following power on. 150V~600V: Less than +/-0.15% of rated output current over 30 minutes following power on. ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) 1.Vout voltage programming	8 6
5.Iemperature coefficient 6.Temperature stability 7. Warm-up drift 10V~100V model: Less than +/-0.25% of rated output current, following 30 minutes warm-up. Constant line, load & temperature. 10V~100V model: Less than +/-0.25% of rated output current over 30 minutes following power on. 150V~600V: Less than +/-0.15% of rated output current over 30 minutes following power on. ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) 11Vout voltage programming	0 0
6.Temperature stability 0.01% of rated lout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature. 7. Warm-up drift 10V~100V model: Less than +/-0.25% of rated output current over 30 minutes following power on. 8. ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) 1. IVout voltage programming 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.15% of rated Vout. 2. Iout voltage programming (*15) 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 3. Vout resistor programming (*15) 0~100%, 0~5V look m full scale, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 4. Iout resistor programming (*15) 0~100%, 0~5V look m full scale, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 4. Iout resistor programming (*15) 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 6. Output voltage monitor (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated Vout. 6. Output current monitor (*15) (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated Vout. 5. SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 1. Power supply OK #1 signal Power supply output monitor. Open collector. Output On: On. Output Off: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Rable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or 4. LOCAL/REMOTE Analog signal analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	
7. Warm-up drift 10V~100V model: Less than +/-0.25% of rated output current over 30 minutes following power on. 150V~600V: Less than +/-0.15% of rated output current over 30 minutes following power on. ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) 1.Vout voltage programming 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.15% of rated Vout. 2.lout voltage programming (*15) 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.5% of rated lout. 3.Vout resistor programming (*15) 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 4.lout resistor programming (*15) 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 5.Output voltage monitor (*23) 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.5% of rated lout. 5.Output current monitor (*15) (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated Vout. 6.Output current monitor (*15) (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated lout. 5.GINALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 11. Power supply OK #1 signal Power supply output monitor. Open collector. Output On: On. Output Off: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 2. CV/CC signal CV/CC Monitor. Open collector. Cc mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog signal enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short, Local: 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open. 6. Interpretation of the programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open. 6. Interpretation of the programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2	
ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) 1.Vout voltage programming	
1.Vout voltage programming	
1.Vout voltage programming	
2.Iout voltage programming (*15) 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: +/-0.4% of rated lout. 3.Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 4.Iout resistor programming (*15) 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: +/-0.5% of rated Vout. 5.Output voltage monitor (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated Vout. 6.Output current monitor (*15) (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated Vout. 5.IGNALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 1. Power supply OK #1 signal Power supply output monitor. Open collector. Output On: On. Output Off: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short, Local: 2~30V or analog programming control monitor signal. Open collector. Oe.06V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short, Local: 2~30V or open.	
3.Vout resistor programming	
4.lout resistor programming (*15) 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: +/-0.5% of rated lout. 5.Output voltage monitor (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated Vout. 6.Output current monitor (*15) (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5% of rated lout. 5.GNALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 1. Power supply OK #1 signal Power supply output monitor. Open collector. Output On: On. Output Off: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 2. CV/CC signal CV/CC Monitor. Open collector. CC mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. O~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	
6.Output current monitor (*15) (*23) 0~5V or 0~10V, user selectable. Accuracy: +/-0.5%. of rated lout. SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 1. Power supply OK #1 signal Power supply output monitor. Open collector. Output On: On. Output Off: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short, Local: 2~30V or 4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	
SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPUT) 1. Power supply OK #1 signal	
1. Power supply OK #1 signal Power supply output monitor. Open collector. Output Off: Off. Maximum Voltage: 30V, Maximum Sink CU 2. CV/CC signal CV/CC Monitor. Open collector. CC mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or 4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sin 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	
1. Power supply OK #1 signal Power supply output monitor. Open collector. Output Off: Off. Maximum Voltage: 30V, Maximum Sink CU 2. CV/CC signal CV/CC Monitor. Open collector. CC mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or 4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sin 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	
2. CV/CC signal CV/CC Monitor. Open collector. CC mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA. 3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or 4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sin 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	urrent: 10mA
3. LOCAL/REMOTE Analog control Enable/Disable analog programming control by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or 4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: 0~0.6V or short. Local: 200 Maximum Sin 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	c.ic iomA.
4. LOCAL/REMOTE Analog signal analog programming control monitor signal. Open collector. Remote: On. Local: Off. Maximum Voltage: 30V, Maximum Sin 5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	or open.
5. ENABLE/DISABLE Signal Enable/Disable PS output by electrical signal or dry contact. 0~0.6V or short, 2~30V or open. User selectable logic. 6. INTERLOCK (ILC) control Enable/Disable PS output by electrical signal or dry contact. Remote: 0~0.6V or short. Local: 2~30V or open.	
7. Programmed signals Two open drain programmable signals. Maximum voltage 25V, Maximum sink current 100mA (Shunted by 27V zener)	
8. TRIGGER IN / TRIGGER OUT signals Maximum low level input voltage = 0.8V, Minimum high level input voltage = 2.5V, Maximum high level input voltage = 2.5V, Maximum high level input voltage = 2.5V, Maximum high level input voltage = 0.5V, Maximum high level input voltage = 0.5V, Minimum high level input voltage = 0.5V, Mi	tive edge trigge
c. Trildger NV Trildger OUT signal tw=10us minimum. Tr,Tf=1us Maximum, Min delay between 2 pulses 1ms. 9. DAISY_IN/SO control signal By electrical Voltage: 0~0.6V/2~30V or dry contact.	
JO. DAISY_IN/SO control signal By electrical voltage: U~U.6V/2~SUV or dry contact.	
FUNCTIONS AND FEATURES	
1. Parallel operation Possible. Up to four (4) identical GSP units. For more power please consult with Factory.	
2. Series operation Consult with Factory	
3. Daisy chain Power supplies can be connected in Daisy chain to synchronize their turn-on and turn-off.	
4. Constant power control Limits the output power to a proggrammed value. Programming via the communication ports or the front panel.	
5. Output resistance control Emulates series resistance. Resistance range: 1~1000mΩ. Programming via the communication ports or the front panel. Programming Output followers to Programming 22000 0.0001-00000 V/mSec. or A/mSec. Or A/	
6. Slew rate control Programmable Output rise and Output fall slew rate. Programming range: 0.0001~999.99 V/mSec. or A/mSec. Programm communication ports or the front panel.	iiiig via the
7. Arbitrary waveforms Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the	the front panel
PROCEDAMMING AND READBACK LIFE LAN	
PROGRAMMING AND READBACK (USB, LAW, V 10 20 30 40 50 60 80 100 150 200 300 400 RS232/485, Optional IEEE (*19)(*20) Interfaces)	500 600
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
2.lout programming accuracy (*15) 0.3% of rated output current	
3.Vout programming resolution 0.002% of rated output voltage	
4.lout programming resolution 0.002% of rated output current	
S.Vout readback accuracy 0.05% of rated output voltage	
6.lout readback accuracy (*15) 0.2% of rated output current	
8.lout readback resolution (of rated output current)) % 0.012% 0.003% 0.003% 0.004% 0.004% 0.005% 0.006% 0.008% 0.012% 0.002% 0.003% 0.003% 0	0.003% 0.002 0.003% 0.005

GENESYS™ GSP10kW/15kW SERIES SPECIFICATIONS

See - velotige protection (DVP)	PROTECTIVE FUNCTIONS		V	10	20	30	40	50	60	80	100	150	200	300	400	500	600
3.0xer votage programming acquery V 0.5-12 1-24 2-36 2-48 5-58125 5-6615 5-882 5-10.57 5-20.5 5-30.75 5-441 5-55125 5-661. Output under voltage limit (DVI) — Prevent from adjusting Vota Below limit. Does not apply in analog programming. Prevert by front panel or communication port. Output under voltage limit (DVI) — Recent adjustment of Vota Device limit. Does not apply in analog programming. Prevent by front panel or communication port. Output under voltage protection (UVP) — Recent adjustment of Vota Device limit. Output under voltage protection (UVP) — Recent adjustment of Vota Device limit. FRONT PANEL Licentrol functions — Whiliple exploses with the Vota Device limit. — Whiliple exploses with the Vota Device limit. — Whiliple exploses with the Vota Device limit. — Protection functions — Whiliple exploses with the Vota Device limit. — Protection functions: Output United Prevaled adjust. — Protection functions: Output United Prevaled adjust. — Protection functions: Selection of Stud Rafes. Address. IP and communication interface. — Communication functions: Selection of Stud Rafes. Address. IP and communication interface. — Communication functions: Selection of Stud Rafes. Address. IP and communication interface. — Communication functions: Selection of Stud Rafes. Address. IP and communication interface. — Continued adjust and the Vota Rafes. Address. IP and communication interface. — Continued Rafes. Address. IP and communication proteins. Selection of Stud Rafes. Address. IP and communication proteins. Selection of Stud Rafes. Address. IP and	1.Foldback protection			Output s User pres	hut-down etable. Re	when po	wer suppl	y changes ycle in aut	mode fro	m CV or Po de, by Pov	ower Limit wer Switch	to CC mo , by OUTP	de or fron UT buttor	n CC or Po n, by rear p	wer Limit oanel or b	to CV mod y communi	e. ication.
4. Over-voltage programming accuracy 5. Output under voltage protection 6. Over temperature protection 7. Output under voltage protection 8. Output voltage voltage protection 8. Output de v	2.Over-voltage protection (OVP)			Output s	hut-down												
S. Output under voltage limit (UV) Prevents distributed voltage intert (UV) Prevents distributed voltage protection Substat down the output. Autor excessery by autorist mode. Prevents adjustment of Yout below limit. Ps output turns Off during under voltage condition. Reset by AC input recycle in autostart mode. by Power Switch, by OUTPUT button, by rear panel or by communication. **RONT PANE *** **Communication** **Incented functions** **Multiple aptitions with 2 finoders* OVERLIVE/UPP namelal adjust*	3.Over -voltage programming rar	nge	V	0.5~12	1~24	2~36	2~44.1	5~55.125	5~66.15	5~88.2	5~110.25	5~165.37	5~220.5	5~330.75	5~441	5~551.25	5~661.5
Sover temperature protection	4. Over-voltage programming acc	curacy		+/-1% of	rated outp	out voltag	e										
7. Output under voltage protection (UV)	5.Output under voltage limit (UV)	L)		Prevents	from adju	sting Vou	t below lir	mit. Does r	not apply i	n analog	programm	ning. Prese	t by front	panel or	communic	ation port	
8. Output under voltage protection (UVP)	6.Over temperature protection								art mode.								
mode, by Power Switch, by UnITPVI button, by rear panel or by communication.	7. Output under voltage limit (UV	L)		Prevents	adjustme	nt of Vout	below lin	nit.									
Lordor functions	8. Output under voltage protection	on (UVP)		Prevents mode, by	adjustme Power Sv	nt of Vout vitch, by C	below lin	nit. P.S out utton, by r	put turns ear panel	Off during or by com	under vo municatio	ltage cond n.	lition. Res	set by AC i	nput recy	cle in autos	start
Lordor functions	FRONT PANEL																
Confunction From Panel adjust			Τ	Multiple	ontions w	ith 2 Enco	ders										
	1.control functions		_											-	-		
								oldback (OCI FNA	II C							
Uptor ONOPE, From Panel Lock. Communication Functions - Selection of Baud Rate, Address, IP and communication language. Analog Control Functions - Selection for Voltage-festive programming, SV/10V, SV/10K programming Analog Control Functions - Selection for Voltage-festive programming, SV/10V, SV/10K programming Analog Control Functions - Selection for Voltage-festive programming, SV/10V, SV/10K programming Analog Control Functions - Selection for Voltage-festive programming, SV/10V, SV/10K programming Analog Control Functions - Selection for Voltage-festive programming, SV/10V, SV/10K programming Analog Control Functions - Selection for Voltage-festive programming, SV/10V, SV/10K programming 1 Fort Panel Buttons Indications											or Ontion	al commu	nication i	nterface	-		
Communication Functions - Selection of Baud Rate, Address, IP and communication language. Analog Control Functions - Selection of Baud Rate, Address, IP and communication language. Analog Control Functions - Selection of Voltage (Current Monitoring SVIOV. SVIOV, SVI			_					01 17 (14,111	,113232,11	3103,030	or option	ui commu	meationi	interruce.			
Analog Control Functions - Selection Voltage/resistive programming, 5V/10V, 5V/10V programming 2.Display								of Raud Ra	to Addro	cc ID and	communi	ration land	211200				
Analog Monitor Functions - Selection of Voltage (Current Monitoring SV10V.			_											na	_		
Vou.14 digits, accuracy, 0.5% of fated output voltage, 4-7 count.			_									JIV, TOIK PIT	ogrammi	ig			
Jourt 4 digits, accuracy, 0.2% of rated output current 4-7 count.	2 Display										J 3V/10V.						
3. Front Panel Buttons Indications	2.Dispidy													-	-		
A. Front Panel Display Indications	2 Front Panal Puttons Indications		_								N CONEIG	LIDATION	CVCTEM	CECHIENIC	ED		
Communication , RS/USB/LAN/IEEE communication, Trigger, Load/Store Cell.	3.FIGHT Parier Buttons indications		+														
1.Operating temperature	4. Front Panel Display Indications			(commun	Current, P nication), I	ower, CV, RS/USB/L <i>F</i>	AN/IEEE co	mmunica	age, Exter tion, Trigg	er, Load/S	nt, Addres Store Cell.	s, LFP, Aut	ostart, Saf	fetstart, Fo	oldback V/	I, Remote	
2.Storage temperature 30-85°C 3.Operating humidity 96 20-90% RH (no condensation). 4.Storage humidity 96 10-95% RH (no condensation). 5.Altitude (*17) Operating: 10000ft (3000m), output current derating 2%/100m or Ta derating 1°C/100m above 2000m. Non operating: 40000ft (12000m). MECHANICAL 1.Cooling Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear 2.Weight GSP 10kW kg Less than 15.5kg. 3.Dimensions (WxHxD) GSP 10kW mm W-423, H:88, D: 441.5 (Without busbars and busbars cover), W-423, H:88, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars and busbars cover), W-423, H:83.5, D: 441.5 (Without busbars cover), W-423, H:83.5 (D: 441.5 (Without busbars cover), W-423, H:83.5 (ENVIRONMENTAL CONDITIONS																
2.Storage temperature	1.Operating temperature			0~50°C.	00% load												
3.Operating humidity			T											-	-		
4.Storage humidity \$ 10–95% RH (no condensation). \$ 5.Altitude (*T7) \$ 0perating: 10000ft (3000m), output current derating 2%/100m or Ta derating 1°C/100m above 2000m. Non operating: 40000ft (12000m). ### MECHANICAL Looling	_ '					ndonentio	m)										
5. Altitude (*17)			-														
MECHANICAL 1.Cooling				_													
Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear 2.Weight GSP 10kW kg Less than 15.5kg. 3.Dimensions (WxHxD) GSP 10kW mm W: 423, H: 88, D: 441.5 (Without busbars and busbars cover), W: 423, H: 88, D: 441.5 (Without busbars and busbars cover), W: 423, H: 88, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 440 (Including busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 440 (Including busbars and busbars cover), W: 423, H: 132.5, D: 440 (Including busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5 (D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5 (D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5 (D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5 (D: 441.5 (Without busbars and busbars cover, and strain relief) (Refer to Outline drawing). W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover, and strain relief) (Refer to Outline drawing). W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover, and strain relief) (Refer to Outline drawing). W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover, and strain relief) (Refer to Outline drawing). W: 423, H: 132.5 (5.Altitude (*17)			Operatin	g: 10000ft	(3000m),	output cu	rrent dera	ting 2%/1	00m or Ta	derating 1	°C/100m a	bove 200	00m. Non o	perating:	40000ft (1	2000m).
Less than 15.5 kg. Less than 15.5 kg.	MECHANICAL																
3.Dimensions (WxHxD) GSP 10kW mm W: 423, H: 88, D: 441.5 (Without busbars and busbars cover), W: 423, H: 88, D: 640 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). 2.Weight GSP 15kW kg Less than 23.5kg. 3.Dimensions (WxHxD) GSP 15kW mm W: 423, H: 32.5, D: 640 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). 4.Vibration	1.Cooling			Forced ai	r cooling	by interna	l fans. Air	flow direc	tion: from	Front par	nel to pow	er supply	rear				
W: 423, H: 88, D: 640 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). 2.Weight GSP 15kW kg Less than 23.5 kg. 3.Dimensions (WxHxD) GSP 15kW mm W: 423, H: 132.5, D: 640 (Including busbars and busbars cover), W: 423, H: 132.5, D: 640 (Including busbars and busbars cover), W: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 423, H: 132.5, D: 640 (Including busbars and busbars cover), M: 421 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). Including busbars and bu	2.Weight	GSP 10kW	kg	Less than	15.5kg.												
mm W: 423, H: 132.5, D: 441.5 (Without busbars and busbars cover), W: 423, H: 132.5, D: 640 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). 4. Wibration	3.Dimensions (WxHxD)	GSP 10kW	mm	W: 423, H W: 423, H	1: 88, D: 44 1: 88, D: 64	11.5 (Witho	out busbar	s and busb s and busb	ars cover), ars cover, a	and strain	relief) (Ref	er to Outlii	ne drawing	g).			
W. 423, H: 132.5, D: 640 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). 4.Vibration W. 423, H: 132.5, D: 640 (Including busbars and busbars cover, and strain relief) (Refer to Outline drawing). 5.Shock WIL-810G, method 514.6, Procedure I, test condition Annex C - 2.1.3.1 5.Shock Less than 20G, half sine, 11mSec. Unit is unpacked. 5.Shock Wolf-100	2.Weight	GSP 15kW	kg	Less than	23.5kg.												
SAFETY/EMC 1.Applicable standards: Safety UL61010-1, CSA22.2 No.L61010-1, IECL61010-1. 1.1. Interface classification Vout≤50V Models: Output, J1, J2, J3, J4, J5, J6, J7, J8 (sense) & J9 (communication options) are Non Hazardous. Vout≤50V Models: Output, J1, J2, J3, J4, J5, J6, J7 & J9 (communication options) are Non Hazardous. Vout≤50V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options) are Non Hazardous. Vout≤50V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. Output & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, 100V <vouts600v &="" (communication="" (sense),="" -="" 100v<vouts600v="" 1min,="" 4242vdc="" inp<="" input="" j1,="" j2,="" j3,="" j4,="" j5,="" j6,="" j7="" j8="" j9="" models:="" options):="" output="" td=""><td>3.Dimensions (WxHxD)</td><td>GSP 15kW</td><td>mm</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>strain relief</td><td>) (Refer to</td><td>Outline o</td><td>drawing).</td><td></td><td></td><td></td></vouts600v>	3.Dimensions (WxHxD)	GSP 15kW	mm								strain relief) (Refer to	Outline o	drawing).			
SAFETY/EMC 1.1. Interface classification Safety	4.Vibration			MIL-8100	i, method	514.6, Pro	cedure I, 1	est condit	ion Anne	C - 2.1.3.	1						
1.1. Interface classification Safety	5.Shock			Less than	20G, half	sine, 11m	Sec. Unit i	s unpacke	d.								
1.1. Interface classification Safety																	
1.1. Interface classification		Cofety	T	111 61010	1 ((122	2 No. I C12	10.1 1501	1010 1 5	II 61010 1								
Cost Conducted emission Cost Conducted emission Cost	1.Applicable standards:	Sarety															
Input - Ground: 2835VDC 1min. 60V≤Vouts100V Models: Input - Output & J8 (sense), J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 4242VDC 1min, Output & J8 (sense) - J1, J2, J3, J4, J5, J6, J7 & J9 (communication options): 850VDC 1min. Output & J8 (sense) - Ground: 1500VDC 1min, Input - Ground: 2835VDC 1min. 100V <vouts600v &="" (communication="" (sense)="" -="" 1275vdc="" 15kw:="" 1min.="" 2.conducted="" 25°c,="" 2835vdc="" 4242vdc="" 500vdc="" 60="" 70%rh.="" and="" at="" emmision<="" ground="" ground:="" gsp10kw="" input="" j1,="" j2,="" j3,="" j4,="" j5,="" j6,="" j7="" j8="" j9="" models:="" mohm="" options):="" output="" td="" to=""><td>1.1. Interface classification</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>n Hazardo</td><td>us.</td></vouts600v>	1.1. Interface classification															n Hazardo	us.
2.Conducted emmision IEC/EN61204-3 Industrial environment, Annex H table H.1 , FCC Part 15-A, VCCI-A. 3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A.	1.2 Withstand voltage			Input - G 60V≤Vot Output & Output & 100V <vo Output & Output &</vo 	round: 28 at≤100V M a J8 (sens a J8 (sens a J8 (sens a J8 (sens a J8 (sens	335VDC Models: Ir se) - J1, J se) - Grou Models: se) - J1, J se) - Grou	1min. 1put – Ou 2, J3, J4, Ind: 1500 Input – O 2, J3, J4, Ind: 2500	tput & J8 J5, J6, J7 VDC 1mir utput & J8 J5, J6, J7	(sense), 7 8 J9 (co 1, Input - 9 8 (sense), 7 & J9 (co	J1, J2, J3 mmunica Ground: 2 J1, J2, J3	, J4, J5, J ation optic 2835VDC 3, J4, J5,	6, J7 & J9 ns): 850\ 1min. J6, J7 and	9 (commu 'DC 1min	unication n. nmunication	options):	4242VDC	
3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A.	1.3 Insulation resistance			GSP10kW	//15kW: 60) Mohm at	25°C, 709	6RH. Outp	ut to Gro	und 500V	'DC						
3.Radiated emission IEC/EN61204-3 Industrial environment, Annex H table H.3 and H4, FCC Part 15-A, VCCI-A.	2.Conducted emmision											-A.					
				_													
4. EMC compliance EMC(*18) IEC/EN61204-3 Industrial environment	4. EMC compliance	FMC(*18)										,	-				

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0° to 50° C.

- "NOTES:

 *1: Minimum voltage is guaranteed to maximum 0.1% of rated output voltage.

 *2: Minimum current is guaranteed to maximum 0.2% of rated output current.

 *3: GSP 10kW: Derate 10k1/°C above 40°C. GSP 15kW: Derate 15k1/°C above 40°C.

 *4: For cases where conformance to various safety standards (UL, IEC, etc...) is required, to be described as 190-240Vac (50/60Hz) for 3-Phase **

 *5: 3-Phase 200V models: At 200Vac input voltage, 3-Phase 400/480V: At 380Vac input voltage. With rated output power.

 *6: Not including EMI filter inrush current, less than 0.2mSec.

 *7: 3-Phase 200V models: 170-265Vac, 3-Phase 400V models: 342-460Vac, 3-Phase 480V models: 342-528Vac. Constant load.

 *8: From No-Load to Full-Load, constant input voltage. Measured at the sensing point in Remote Sense.

 *9: For 10V~150V models: Measured with JEITA RC-9131C (1:1) probe. For 200~600V models: Measured with 100:1 probe.

 *10: The maximum voltage on the power supply terminals must not exceed the rated voltage.

 *11: From 10% to 90% or 90% to 10% of Rated Output Voltage, with rated, resistive load.

 *12: From 90% to 10% of Rated Output Voltage, with rated, resistive load.

 *13: For load voltage change, equal to the unit voltage rating, constant input voltage.

 *14: For 10V model the ripple is measured at 2V and rated output current. For other models, the ripple is measured at 10% of rated output voltage. B.W 5Hz~1MHz.

 *15: The Constant Current programming, readback and monitoring accuracy do not include the warm-up and Load regulation thermal drift.

 *16: Measured at the sensing point.

 *17: For 10V model Ta derating 2°C/100m."

 *18:"Signal and control ports interface cables length: Less than 3m, DC output power port cables length: Less than 30m.

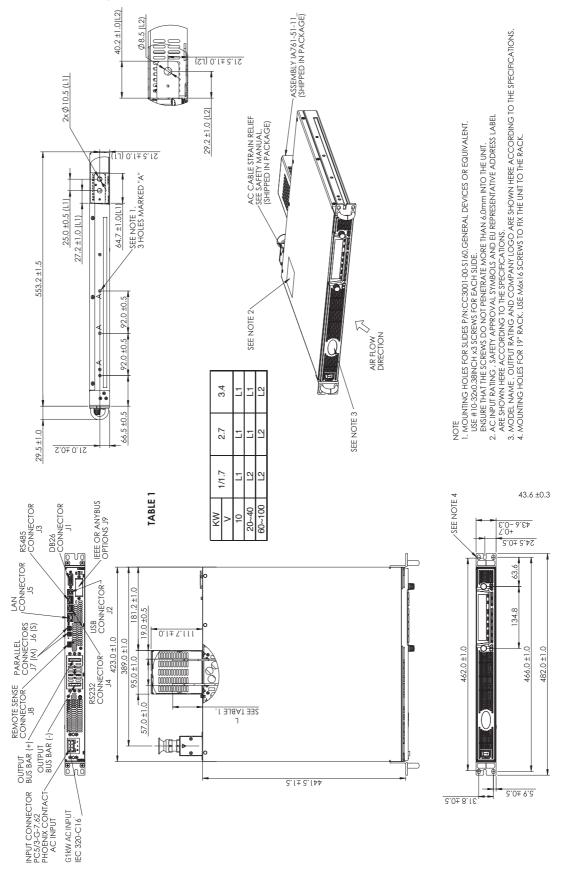
 *19:Max. ambient temperature for using IEEE is 40°C.

 *20:GSP10kW For 10V model only: Max. output current for using IEEE is 1200A up to 40°C and 900A up to 30°C.

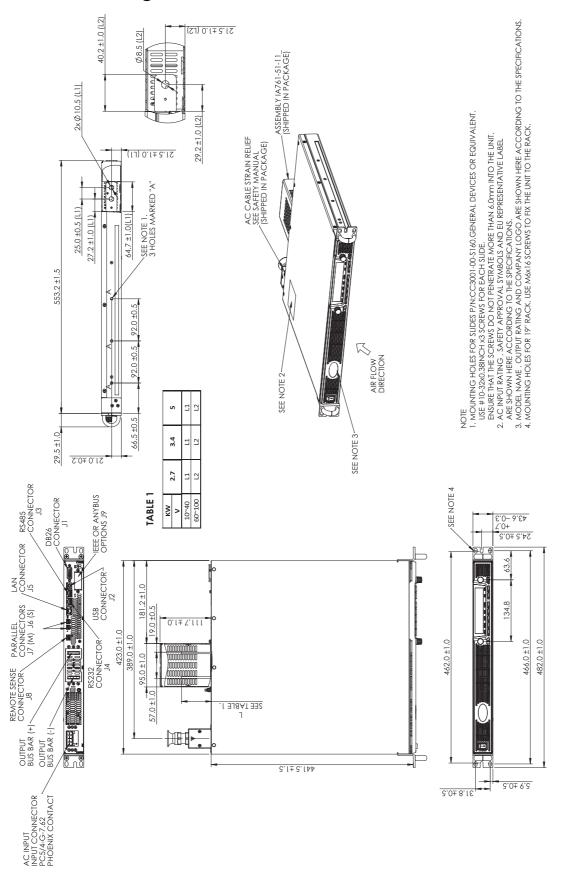
 *21: For 10V model only: For 3-Phase 200V efficiency is 88.5%

 *22: Typ, at Ta=25°C, rated output power.

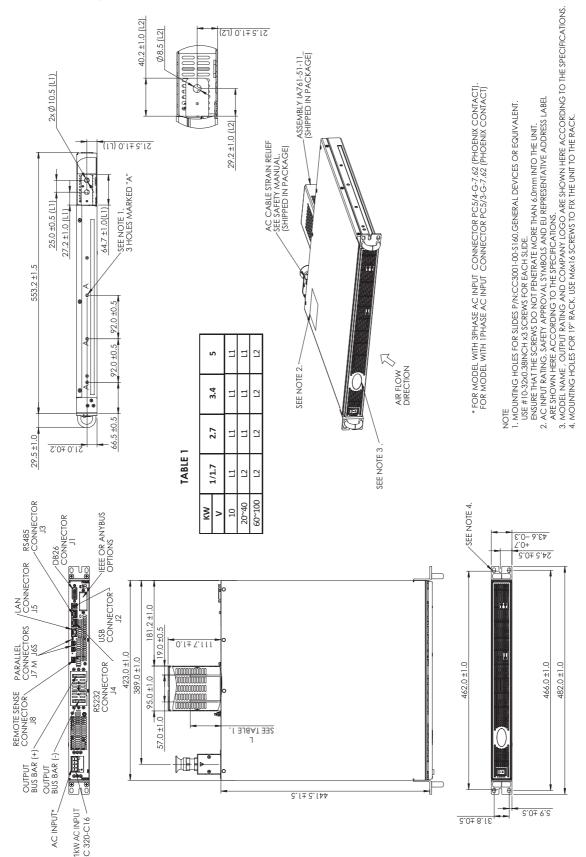
Outline Drawing GENESYS™ G1kW/1.7kW/2.7kW/3.4kW - 1-Phase



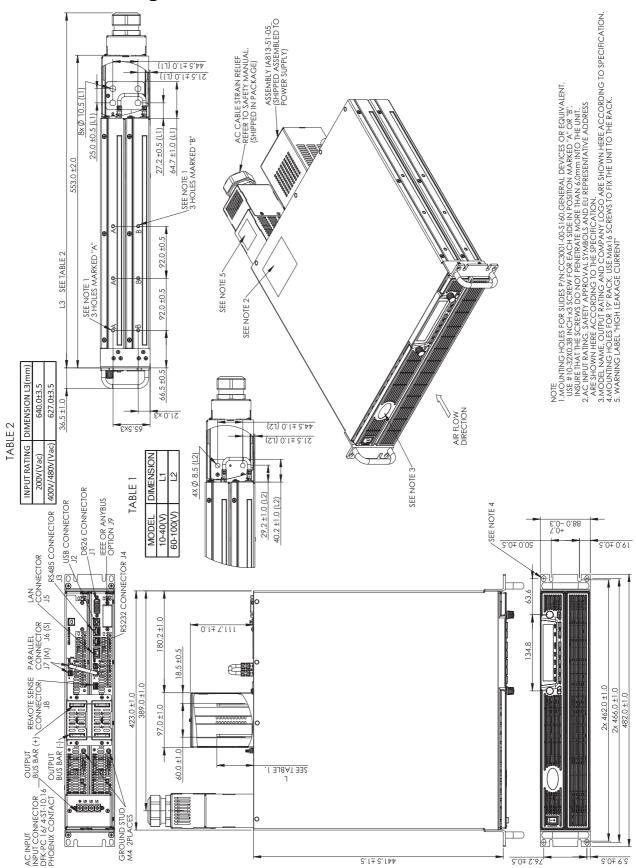
Outline Drawing **GENESYS™** G2.7kW/G3.4kW/G5kW - 3-Phase



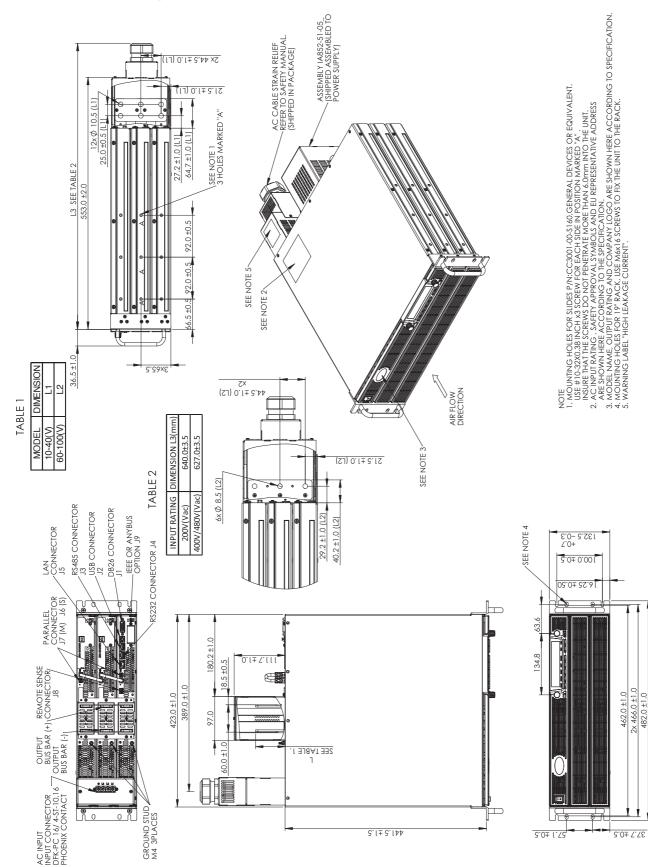
Outline Drawing GENESYS[™] GB1kW/1.7kW/GB2.7kW/GB3.4kW/GB5kW - ATE Version



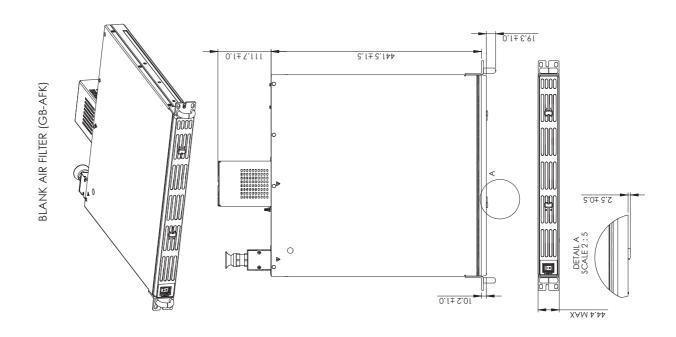
Outline Drawing **GENESYS™** GSP10kW

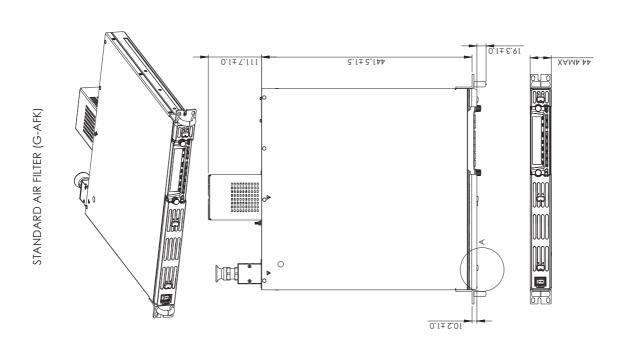


Outline Drawing GENESYS™ GSP15kW



Outline Drawing **GENESYS™** Air Filter Kit

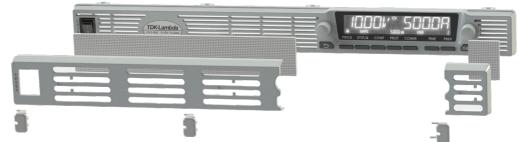




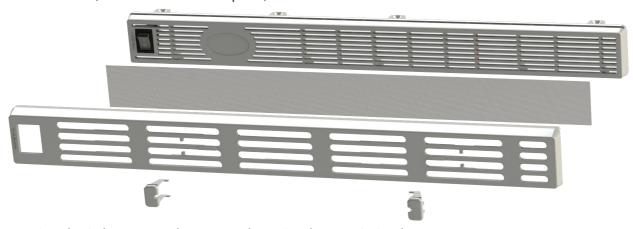
Front Panel Air Filter Assembly

Front panel dust cover is available for dusty air environment applications Dust cover is removable snap-in filter (for easy maintenance)

• Part Number (for standard unit) : **G-AFK**



• Part Number (for unit with blank front panel): GB-AFK



For GSP 10kW/15kW series order part number: GSP10kW-AFK / GSP15kW-AFK

Accessories

1. Front Panel dust filter / Field installation kit:

Technical Specifications: Unit with Air Filter Assembly Installed

- Derating (environmental):
- Operating Temperature
- For all models (except 10V): 0°C to +40°C full load; For 10V model: 0°C to +30°C, derate 5A/°C for 30°C < Ta < +40°C
- Altitude
- For all models (except 10V): derate 2°C/100m or 2% of load/100m (above 2000m)
- For 10V model: derate 1°C/100m or 2% of load/100m (above 2000m)

Filter Foam Technical Specifications

- Material: reticulated polyurethane foam
- Thickness:3.8 mm
- Porosity: 45ppi
- Operating Temperature Range: 0°C to +60°C
- Storage Temperature Range: -40°C to +85°C
- · Humidity: 95% RH

Air Filter Assembly Components

Standard Unit (P/N: G-AFK)

- Air Filter Cover (two pieces)
- Slide Button #1 (two locations: near AC ON/OFF switch and near left-hand side of front panel display)
- Slide Button #2 (one location: right-hand side of front panel display)
- · Filter foam (two pieces)

Blank Front Panel Unit (P/N: GB-AFK)

- · Air Filter Cover (one piece)
- Slide Button #1 (two locations) Filter foam (one piece)



NORTH AMERICA

TDK-Lambda Americas Inc 405 Essex Rd. Neptune, NJ 07753 Tel: +1-732-922-9300 Fax: +1-732-922-1441 E-mail: sales@us.tdk-lambda.com www.us.lambda.tdk.com

UK

TDK-Lambda UK Ltd.
Kingsley Avenue Ilfracombe, Devon
EX 34 8ES, United Kingdom
Tel: +44-1271-856666 Fax: +44-1271-864894
E-mail: info@uk.tdk-lambda.com
www.emea.lambda.tdk.com/uk

FRANCE

TDK-Lambda France SAS 3 Avenue du Canada, Parc Technopolis - Bâtiment Sigma, 91940 Les Ulis - France CS 41077 Tel: +33 1 60 12 71 65 Fax: +33 1 60 12 71 66 E-mail: france@fr.tdk-lambda.com www.emea.lambda.tdk.com/fr

GERMANY

TDK-Lambda Germany GmbH Karl-Bold-Str.40, D-77855 Achern, Germany Tel: +49-7841-666-0 Fax: +49-7841-500-0 E-mail: info.germany@de.tdk-lambda.com www.emea.lambda.tdk.com/de

AUSTRIA

TDK-Lambda Germany GmbH Austria Sales Office Aredstrasse 22, 2544 Leobersdorf, Austria Tel: +43-2256-65584 Fax: +43-2256-64512 E-mail: info@at.tdk-lambda.com www.emea.lambda.tdk.com/at

ITALY

TDK-Lambda France Sas Succursale Italiana Via Giacomo Matteotti 62, 20092 Cinisello Balsamo (MI), Italia Tel: +39-02-6129-3863 Fax: +39-02-6129-0900 E-mail: info.italia@it.tdk-lambda.com www.emea.lambda.tdk.com/it

ISRAEL

TDK-Lambda Ltd.
Sales Office: Alexander Yanai 1, Petah Tikva, 4927701, ISRAEL Tel: +972-3-9024-333 Fax: +972-3-9024-777
Plant: 56 Haharoshet St.,
Karmiel Industrial Zone 2165158, Israel
Tel: +972-4-9887-491 Fax: +972- 4-9583-071
www.emea.lambda.tdk.com/il E-mail: info@tdk-lambda.co.il

Switzerland

TDK-Lambda Germany GmbH Switzerland Sales Office, Eichtalstr. 55 8634 Hombrechtikon - Switzerland Tel: +41 44 850 53 53 E-mail: info@ch.tdk-lambda.com www.emea.lambda.tdk.com/ch

Denmark

TDK-Lambda Nordic Haderslevvej 36B, DK-6000 Kolding, Denmark TEL: +45-8853-8086 E-mail: info@dk.tdk-lambda.com www.emea.lambda.tdk.com/dk

JAPAN

TDK-Lambda Corporation Nihonbashi Takashimaya Mitsui Bldg. 2-5-1 Nihonbashi, Chuo-ku, Tokyo 103-6128, JAPAN TEL: +81-3-6778-1113 FAX: +81-3-6778-1160 www.jp.lambda.tdk.com

CHINA

TDK-Lambda (China) Electronics Co. Ltd, Shanghai Office 5th Floor Kehui Tower, 1188 Qinzhou Road (North), Xuhui District Shanghai 200233, China Tel: +86-21-6485-0777 Fax: +86-21-6485-0666 www.lambda.tdk.com.cn

Beijing Branch of TDK-Lambda (China) Electronic Co. Ltd. Room 12B11-12B12, Unit 7 Dacheng square, No.28 Xuanwumenxi Street, Xuanwu District Beijing, 100053, CHINA Tel: +86-10-6310-4872 Fax: +86-10-6310-4874 www.lambda.tdk.com.cn

Shenzhen Branch of TDK-Lambda (China) Electronics Co.Ltd. 69/F, Ping An Finance Centre, 5033 Yitian Road, Futian District, Shenzhen, China
Tel: +86-755-83588261 Fax: +86-755-83588260 www.lambda.tdk.com.cn

KOREA

TDK-Lambda Corporation Korea Branch Seocho-Dong,12F. Songnam Bldg. 273, Gangnam Daero, Seocho-Gu, Seoul 06730, Republic of Korea Tel: +82-2-3473-7051 Fax: +82-2-3472-9137 www.lambda.tdk.co.kr

SINGAPORE

TDK-Lambda Singapore Pte.Ltd. Blk 1008 Toa Payoh North # 07-01/03 Singapore 318996 Tel: +65-6251-7211 Fax: +65-6250-9171 www.sg.lambda.tdk.com

INDIA

TDK India Private Limited. Power Supply Division #87, The Centrum, 4th Floor, Infantry Road, Bengaluru, Karnataka, -560 001, INDIA Tel: +91-80-40390660 Fax: +91-80-40390603

MALAYSIA

TDK-Lambda Malaysia Sdn. Bhd. (Nilai Office) c/o TDK (Malaysia) Sdn. Bhd., Lot 709, Nilai Industrial Estate 71800 Nilai, Negeri Sembilan, MALAYSIA TEL: +60-6-797-8800 Fax: +60-6-797-8966



hy-line.de LEADER IN TECHNOLOGY. HY-LINE Power Components Vertriebs GmbH Inselkammerstr. 10 D-82008 Unterhaching Ø +49 89/ 614 503 -10 power@hy-line.de

Hochstrasse 355 CH-8200 Schaffhausen © +41 52 647 42 00 info@hy-line.ch

HY-LINE AG



Series Rev.



GLOBAL NETWORK