

# Data Sheet

## 90W AC-DC Desktop Power Supply



- Universal AC Input 90 – 264 VAC
- Low Voltage Power Supply
- No minimum load requirement
- 100 % burn in test
- Standard: CE, UL, cUL, FCC
- CEC & DOE Efficiency Level VI compliant
- ErP Tier2 compliant
- RoHS compliant



### Model Selection Guide:

Typ	Input nominal voltage [VAC]	Input current full-load [mA]	Output voltage [VDC]	Output current Max. [mA]
PSD90E120K2	90 – 264	1500	12	7500
PSD90E150K2	90 – 264	1500	15	6000
PSD90E190K2	90 – 264	1500	19	4740
PSD90E240K2	90 – 264	1500	24	3750
PSD90E480K2	90 – 264	1500	48	1875

## Specifications:

<b>Input</b>	
Input Voltage Range	AC 90V – 264V
Frequency Rated	50 – 60 Hz (47 – 63Hz)
Input Current Rated	Max. 1.5 A RMS
Inrush Current	No damage. On power when switching on/off repeatedly under any condition
Leakage Current	Max. 0.25 mA
Average Efficiency	Min. 88% (CEC & DOE Level VI compliant) Min. 88% (ErP Compliant) Min. 89% (EC COC Tier 2 compliant)
Input Power (no load)	<0.21W (CEC & DOE Level VI compliant) <0.21W (ErP Compliant) <0.15W (EC COC Tier 2 compliant)

<b>Output</b>	
Output Voltage	See model selection guide
Output Current max.	See model selection guide
Line Regulation	±1%
Output Voltage Tolerance	±5%
Over Voltage Protection	Yes (Protect through primary circuit IC)
Short Circuit Protection	Yes (Output shut down and auto restart)
Ripple Voltage (Full load)	Max. 300mV (p-p) at 100-240V AC Input *1)

\*1) Measuring is done by 20MHz bandwidth oscilloscope and terminated each output with a 10uF aluminium electrolytic capacitor and 0.1uF ceramic capacitor.

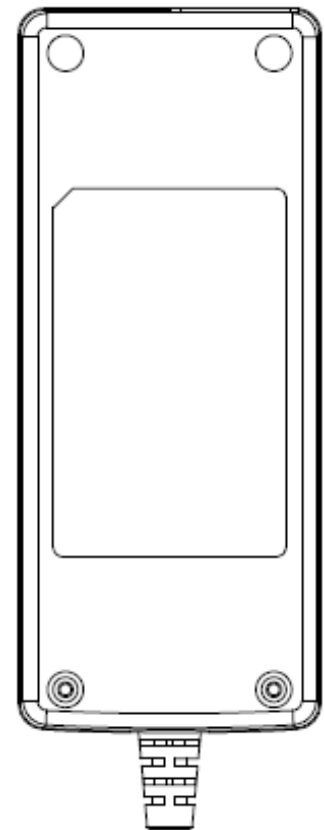
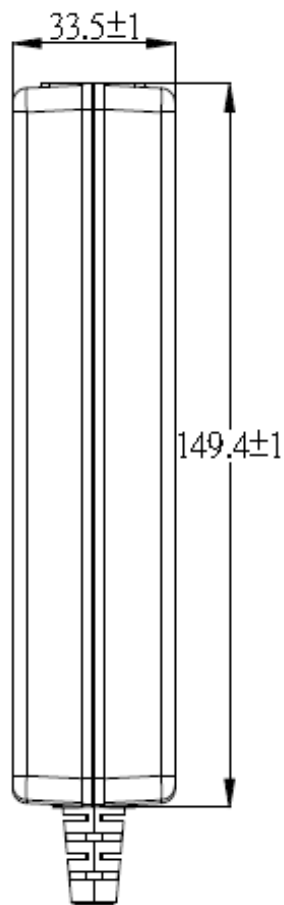
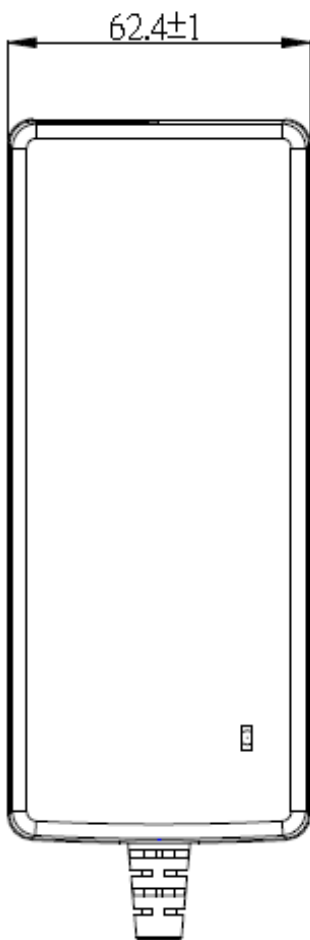
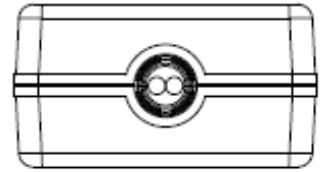
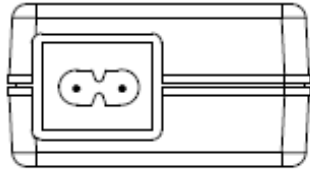
<b>Others</b>	
Hi-pot Specification (input to output)	I/P-O/P : 3000Vac OR 4242VDC, 10mA 60Sec. (between primary side and secondary side.)
Insulation Resistance (input to output)	500VDC to test the input to output not to be less 100MΩ
Cooling	Natural Cooling
RoHS compliant	Yes

<b>Environment</b>	
Temperature	Operating : 0°C to +40°C Storage : -10°C to +70°C
Humidity	Operating : 20% to 80% Storage : 10% to 90%
Packaging	white folding box

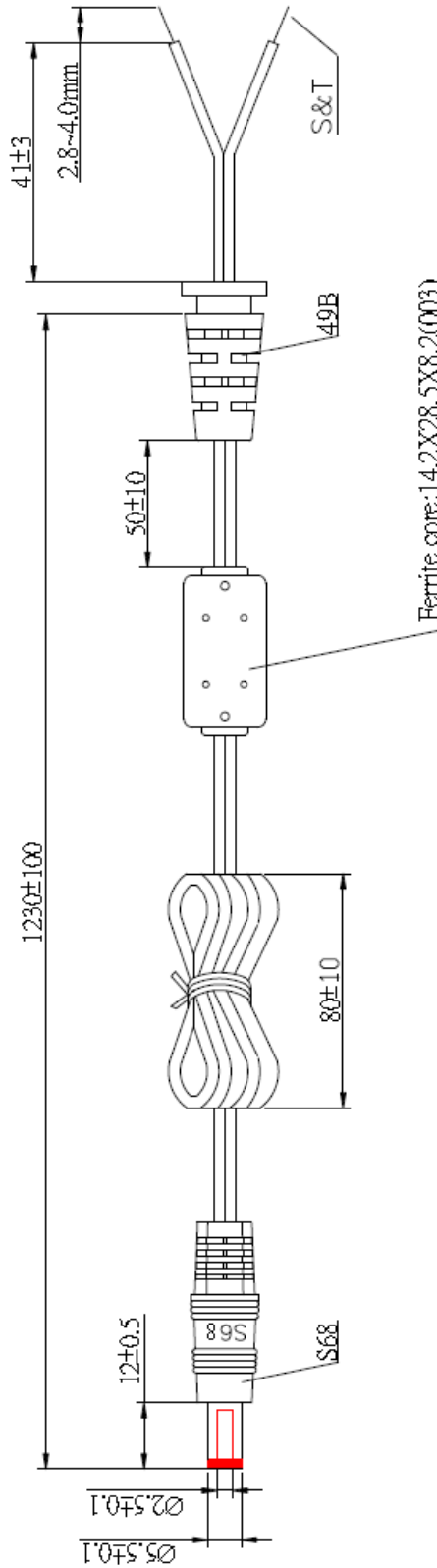
<b>Safety &amp; EMC</b>			
Type (Marking)	Country	Standard	
UL/cUL	USA	Safety	UL62368-1
			CSA C22.2 No. 62368-1
CE	Europe	EMC	EN61204-3:2000, Class B
			EN55032:2012+AC:2013, Class B
			EN55024:2010
		LVD	2014/35/EU, EN 62368-1:2014/A11:2017
		Safety	EN 62368-1:2014 / A11:2017
		ErP	2019/1782

<b>Cable/Connectors</b>	
AC Plug	Inlet IEC320 / Type C8 (2-Pin)
DC Plug	DC power plug: OD 5,5mm / ID 2,1mm / L 12mm
DC Cable	2 wire AWG16 (see drawing)

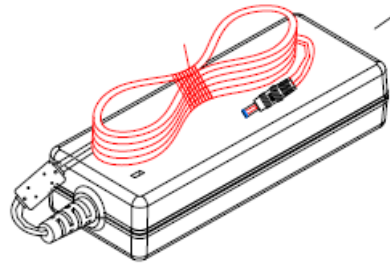
**Dimensions:**



**DC cable/connector:**



**Others/Drawings:**



**Accessories:**

AC-cables	Cable	AC-Plug	Appliance Outlet
H7M305	2-pole instrument cable, L=1.8m	Euro-Plug	C7
H7M306	3-pole instrument cable, L=1.8m	US-Plug	C7
H7M307	3-pole instrument cable, L=1.8m	AUS-Plug	C7
H7M308	3-pole instrument cable, L=1.8m	UK-Plug	C7