



Datasheet 07/2025



*illustration similar

12S1P HI1201SN01 Battery Pack

- 12S1P Li-Ion Battery pack
- 43.2 V nominal voltage
- 1.95 Ah nominal capacity, 84.24 Wh
- Panasonic premium quality cell UR18650RX
- Shrink Foil

12S1P HI1201SN01 Battery Pack

Specifications

Item	Descriptions	Specifications	Remark
1	Model Number	HI1201SN01	
2	Cell	Panasonic UR18650RX	
3	Configuration	12S1P	
4	Nominal Voltage	43.2 V	3.6 V * 12S
5	Nominal Capacity	1.95 Ah	1.95 Ah * 1P
6	Watt-Hour (UN38.3)	84.24 Wh	Calculated: 7.02 Wh (V *Ah)
7	Internal Resistance	<250mΩ	Measure from output terminal of battery pack
8	Recommended operation Temperature	Standard Charge 0°C ... +45°C Standard Discharge -20°C ... +60° C	
9	Storage condition	< one month -20°C ... +50°C < three months -20°C ... +45°C	Percentage of recoverable capacity 80%
10	Humidity	30 ... 80%	
11	Charging Voltage (Maximum)	50.4 V	
12	Charge Current	<1.0 A	
13	Discharge Current avg.	<2.0 A	
14	BMS Design (1S-11A)	(1) Over charge voltage threshold (2) Under voltage threshold (3) Over charge current threshold (4) Over discharge current threshold (5) Short circuit protection (6) Short circuit delay time	(1) 4.25 ± 0.05 V (2) 3.00 ± 0.05 V (3) 5.0 ± 0.5 A (4) 12.0 ± 0.50 A (5) 80.0 ± 1.0 A (6) typ. 225 μs
15	Connection type and pin definition	Connector: JST VHR-2N Terminal: SVH-21T-P1 Cable length of output: 380mm ± 5mm Pin 1: P+ (Red) with UL1015, 18AWG Pin 2: P- (Black) with UL1015, 18AWG	

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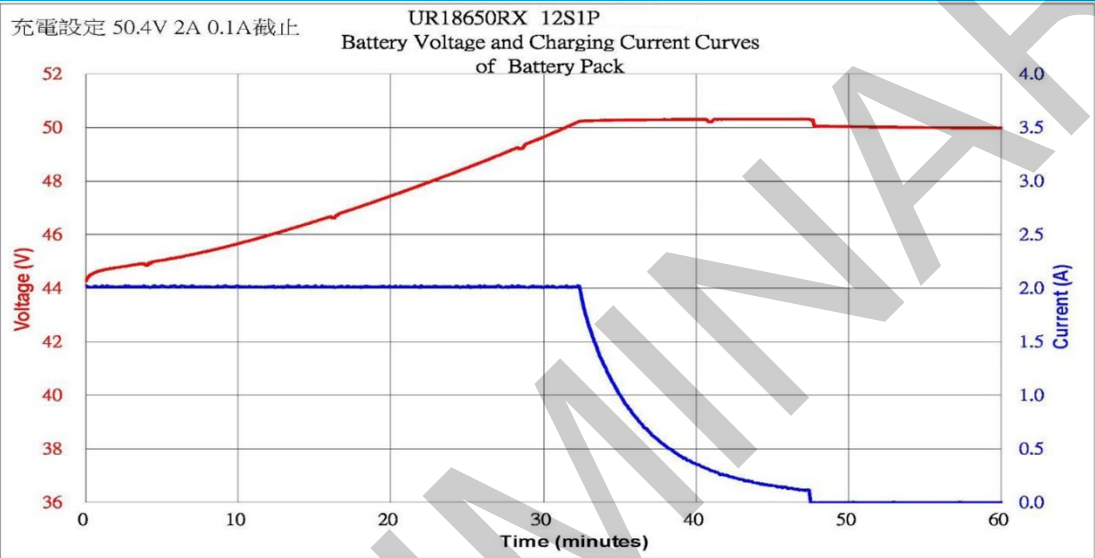
Specifications

16	Enclosure	Heat shrink	
17	Weight (g)	554 g $\pm$ 5%	
18	Dimension(mm)	Length: 73.5 $\pm$ 0.5 mm Width: 57.2 $\pm$ 0.5 mm Height: 77.6 $\pm$ 0.5 mm	
19	IP standard	IP20	
20	Certifications planned	UN38.3 Rev. 8 IEC 62133-2 :2017/AMD1:2021 BS EN 62133-2:2017/AMD1:2021 IEC 60601-1-2 :2014+A1:2020 BS EN 60601-1-2:2015+A1 :2021 CE and UKCA	UN Transport Test Safety Safety UK EMC EMC UK DoC

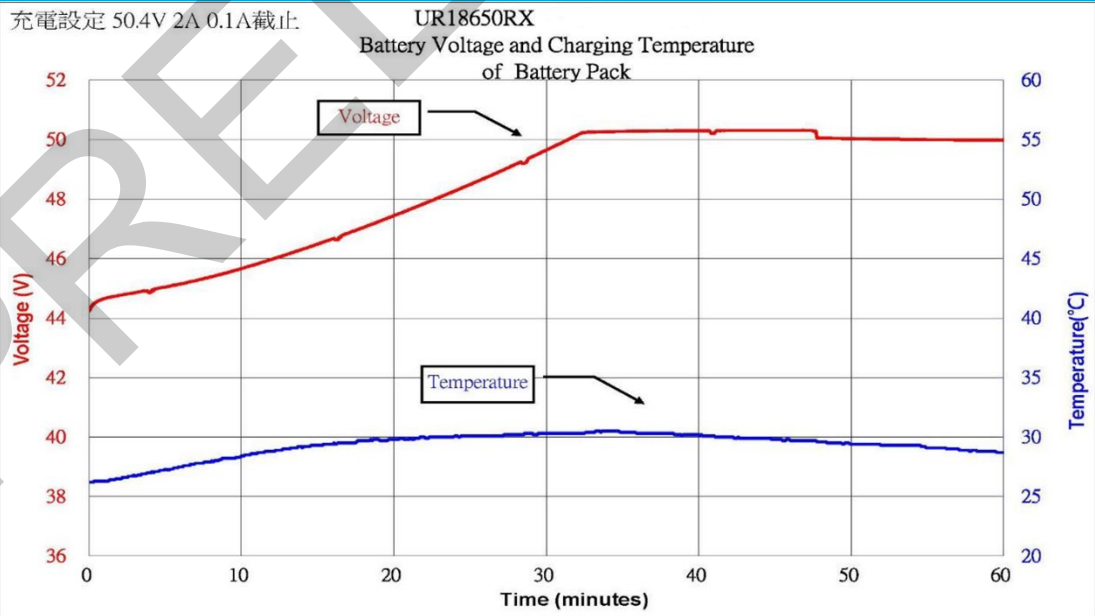
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Charge Performance Curve

Charging condition	50.4 V / 2.0 A, 0.1 A cut off
Charging time	47 min
Charging capacity	1.87 Ah



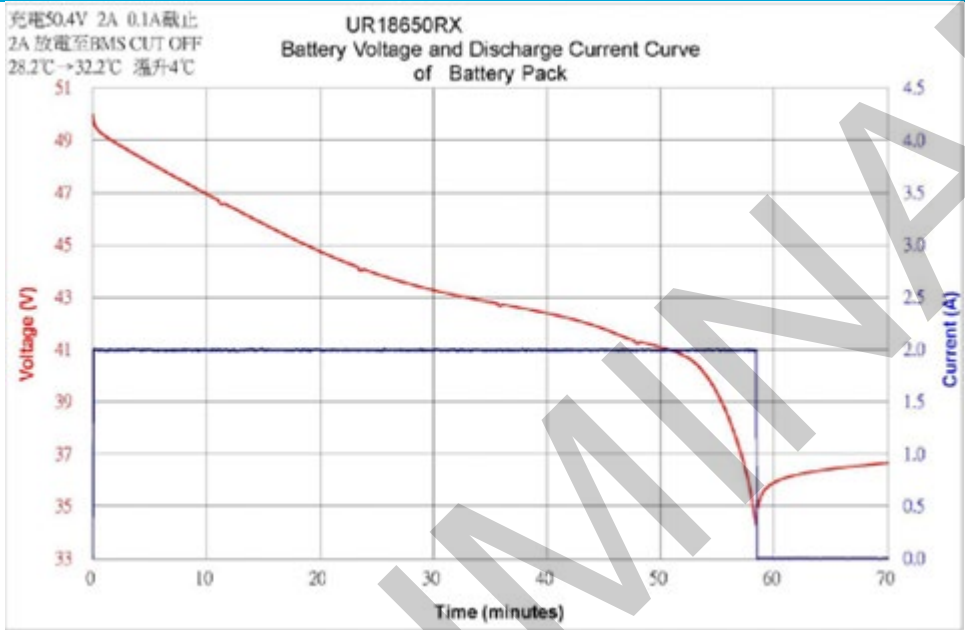
Charging condition	50.4 V / 2.0 A, 0.1 A cut off
Charging time	47 min
Cell temperature rise	26°C → 31°C



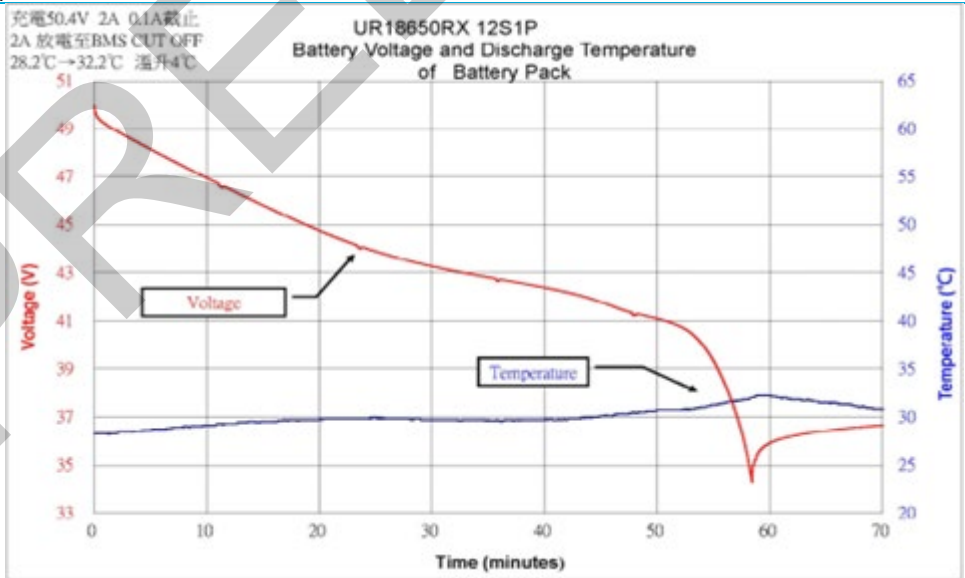
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Discharge Performance Curve

Discharging condition	2.0 A / 32 V end
Discharging time	58.4 min
Discharging capacity	1.94 Ah



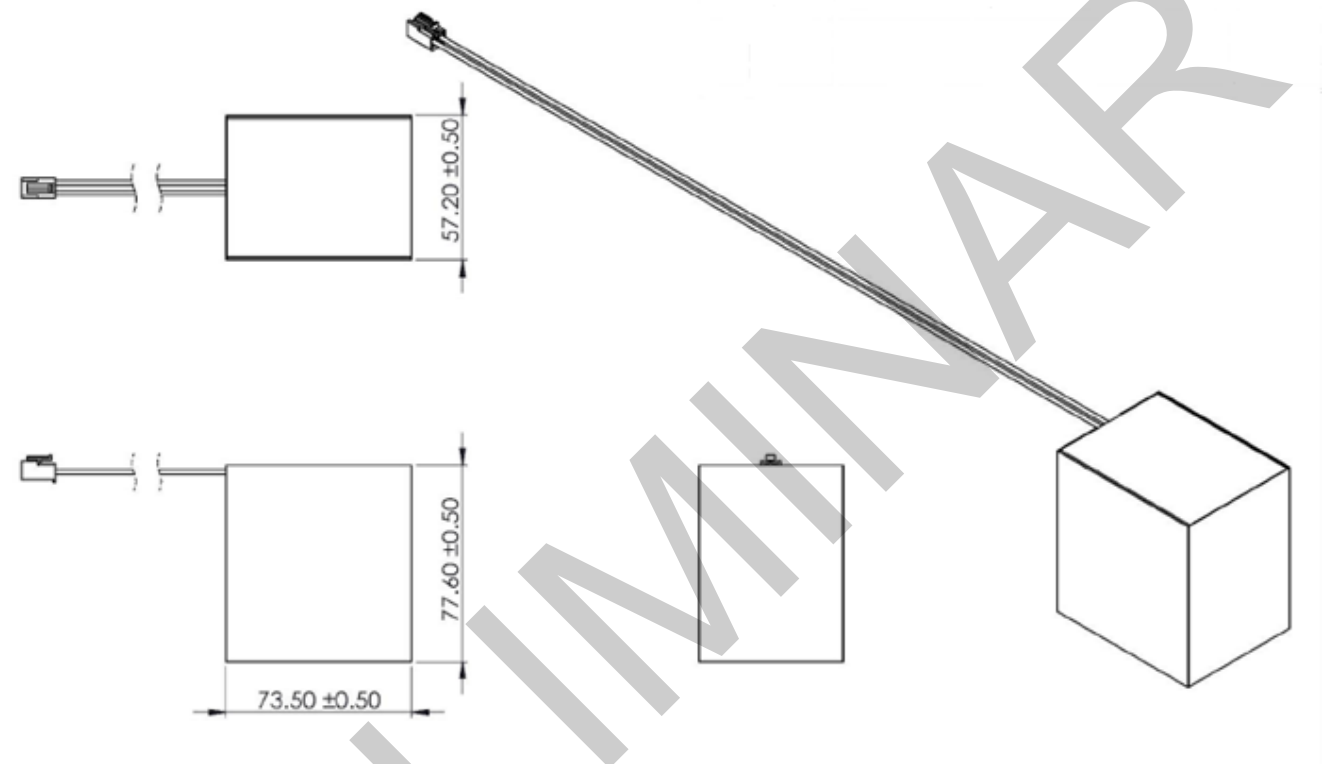
Discharging condition	6.0 A / 32 V end
Discharging time	58.4 min
Cell temperature rise	28.2℃ → 32.2℃



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Mechanical

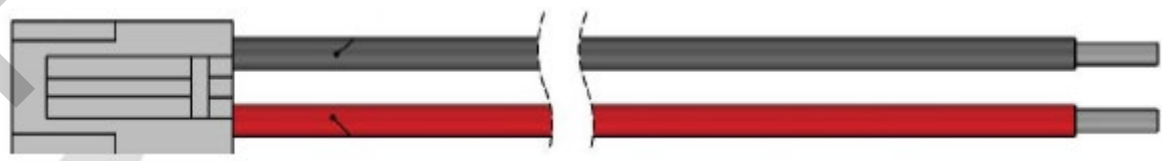
Drawing



Connector

Connector: JST VHR-2N
Terminal: SVH-21T-P1
Cable length: 380 mm $\pm$ 5mm

Pin	Definition	Color	AWG	Wire
1	Pack +	RED	18	UL1015
2	Pack -	BLACK	18	UL1015



Label

Part N°: HI1201SN01

Rechargeable Lithium-ion Battery

12S1P Panasonic UR18650RX

Nominal voltage: 43.2Vdc 12INR19/66 + RED - BLACK

Nominal capacity: 84.24Wh/ 1950mAh

Charge voltage: 50.4Vdc

Safety advice for Li-ion batteries:

Don't crush ! Don't heat or incinerate.

Don't short-circuit! Don't dismantle!

Don't immerse the battery in any liquid to avoid vent or rupture!

Observe charging instructions.

Don't charge below 0°C.

Discharge temperature range: -20 to + 60°C





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W03/25 Made In Taiwan HI1201SN01-25-03-0026

Serial Number:	Serial Number	Definition	Remark
	Part No-YY-WW-XXXX	HI1201SN01	53 x 46 mm / 0.5R * 4
	(HI1201SN01-25-06-0385)	YY: production year	
		WW: production week	
		XXXX: serial number	

12S1P HI1201SN01 Battery Pack

Photos

(*illustration similar)



Packaging

Battery pack in plastic bag.



Accessories

Item	Part number	Remark
Charger	TBD	On request

12S1P HI1201SN01 Battery Pack

Contact

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Energy_Datasheet_HI1201SN01_12S1P | July 2025
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