

6) LED Indicator

1. Charging Status Indication:

Standby: Green LED blinking 1S ON, 1S OFF.

Pre-charge: RED LED always on

Fast charging: RED LED always on.

Full charged: Green LED always on.

2. Failure indication:

Charger failure: Red LED always on

Battery Error or Failure: Red LED blinking 0.5S ON, 0.5S OFF

Charger latch up fault indication: Red LED & Green LED blinking 0.5S ON, 0.5S OFF. (Turn off the input AC switch, until the LED indicator lights off and then turn on the AC switch, the charger will resume normal work.)

7) Disclaimer of Warranty

1. We guarantees replacement or repair of chargers that are recognized as defective under normal environmental conditions. The validation of the warranty time starts with the delivery date from the manufacturer. The manufacturer is limiting the free guarantee to working hours and spare parts.

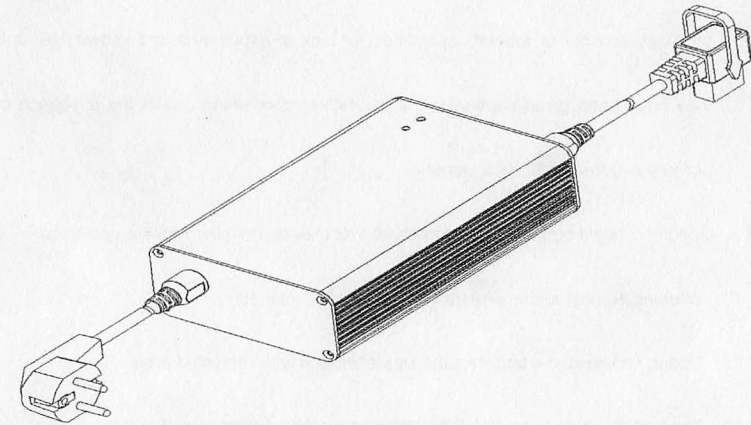
2. For damages caused by non-observance of the operating instructions, inappropriate start up or handling as well as reconstructions and modifications of the device, the warranty claim expires and we assume no liability for consequential damage to property or persons.

3. Repair work must only be conducted by authorized companies or professional staff.

User Manual

SPC-290W Smart Charger

Rev. 1.0



Smart Charger Model

- | | | |
|---|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> DC33.6V8A | <input type="checkbox"/> DC43.8V6A | <input type="checkbox"/> DC46.2V5.7A |
| <input checked="" type="checkbox"/> DC54.6V5A | <input type="checkbox"/> DC58.4V4.7A | <input type="checkbox"/> DC58.8V4.5A |
| <input type="checkbox"/> DC73V4A | <input type="checkbox"/> DC80.3V3.5A | <input type="checkbox"/> DC88.2V3A |
| <input type="checkbox"/> Other | | |

Thank you very much for your trust on us and our products.

Please read the operating instructions carefully before use.

1) Safety Rules and General Warnings:

1. The charger is exclusively designed for specific version rechargeable Lithium-batteries and must not be used for other purposes. Please check the compatibility between charger and the battery before use.
2. Keep some space between charger and the battery while charging.
3. Protect against direct solar radiation, rain and strong vibration.
4. Use the charger in dry, low dust and well ventilated environment without been covered.
5. Device is not suitable for children. Do not open as high voltage inside. Repair work must be conducted only by authorized companies or specialized technical staff.
6. Use charger in the environment of damp, high temperature, flammable and explosive gas is strictly prohibited.

- 7、 It is strictly prohibited to change, re-paste, re-print nameplate or instructions manual without our authority.
- 8、 This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- 9、 Children should be supervised to ensure that they do not play with the appliance.
- 10、 Warning against recharging non-rechargeable batteries;
- 11、 During charging, the battery must be placed in a well ventilated area
- 12、 The battery charger must only be plugged into an earthed socket-outlet

2) General Information:

SPC-290WW-xxxxyy-zP series charger is developed on the basis of feature of lithium battery and the performance of BMS. It is a smart charger with high precision, high safety, energy-saving and intelligent charge management, which is widely used for charging lithium-ion batteries on electric vehicles such as electric scooters, electric floor washers, electric forklifts, AGV logistics vehicles, electromotive robots and other electric equipment.

3) Special Features

- High efficiency and natural cooling
- Empty load no output, safety enhanced
- Intelligent Management & Identifying Battery
- Overvoltage, over current, over-temperature, short-circuit, reverse polarity protection.
- LED indicators show working status.

4) Technical Specifications

Version	8S 33.6V/8A	12S 43.8V/6A	11S 46.2V/5.7A	13S 54.6V/5A	16S 58.4V/4.7A
Input voltage	100-240Vac/50-60Hz				
Charging Vnor.	33.6VDC ±1%	43.8VDC±1%	46.2VDC ±1%	54.6VDC ±1%	58.4VDC ±1%
Charging Imax.	8A	6A	5.7A	5A	4.7A
Efficiency	>92% @230V	>92% @230V	>92% @230V	>92% @230V	>92% @230V
Cooling	Natural cooling				

Protection	OVP,OCP,OTP,S/C, Reverse Polarity			
Operating Temp.	-20°C-40°C			
Storage Temp.	-40°C-85°C			
Size/Weight	L195-W114-H54mm, 1.6Kg			

Version	14S 58.8V/4.5A	20S 73V/4A	22S 80.3V/3.5A	21S 88.2V/3A
Input voltage	100-240Vac/50-60Hz			
Charging Vnor.	58.8VDC ±1%	73VDC ±1%	80.3VDC ±1%	88.2VDC ±1%
Charging Imax.	4.5A	4A	3.5A	3A
Efficiency	>92% @230V	>92% @230V	>92% @230V	>92% @230V
Cooling	Natural cooling			
Protection	OVP,OCP,OTP,S/C, Reverse Polarity			
Operating Temp.	-20°C-40°C			
Storage Temp.	-40°C-85°C			
Size/Weight	L195-W114-H54mm, 1.6Kg			

Model	Output voltage (Vdc)	Test Li-ion battery information
SPC-290WW-xxxxyy-zP	28.8-43.8V	28.8V, Max. 20Ah, 32 Cells (8 series*4 parallel)
	43.9-58.8V	43.9V, Max.40Ah, 96 Cells (12 series*8 parallel)
	58.9-73V	58.9V, Max.40Ah, 84 Cells (14 series*6 parallel)
	73.1-88.2V	73.1V, Max.40Ah, 160 Cells (20 series*8 parallel)

5) Product Figure

1 Red LED 2 Green LED 3 Output cable 4 input cable

