



## Charger **7 STAGES**

12.0 V 5.0 A / 24.0 V 2.5 A



## **Electrical Specification**

The specification is intended to describe as detailed as possible the functions and performance of the subject Switching Mode Power Supply or Battery Charger.

Any comment or additional requirements to this specification from our value client will be highly appreciated treated as a new target for us to approach.

Input Electrical Requirements	
Normal Input Voltage	100 - 240 Vac
Input Voltage Range	90 - 264 Vac
Input Frequency	50 / 60 Hz

Environment Requirement	
The power supply will be compliant with each item in this specification for the following environment	
Operating Temperature	0 ~ 40°C
Storage Temperature	-10 ~ 70°C
Operating Humidity	10 ~ 90% RH (Non-condensing)
Storage Humidity	5 ~ 90% RH (Non-condensing)

Output Electrical Requirements		
For Lead Acid Battery, AGM and Gel,	For Lead Acid Battery, AGM and Gel, Auto selected	
Normal Output	12.0 V 5.0 A / 24.0 V 2.5 A	
Float Output Voltage	13.6 ~ 14.0 Vdc / 27.2 ~ 28.0 Vdc	
Bulk Charge Mode Voltage	$8.0 \sim 14.8 \ \text{Vdc} \ / \ 16.0 \sim 29.60 \ \text{Vdc} \ \text{(Summer mode)}$ $8.0 \sim 15.2 \ \text{Vdc} \ / \ 16.0 \sim 30.4 \ \text{Vdc} \ \text{(Winter mode)}$	
Battery Mode Voltage	8.0 ~ 14.8 Vdc / 16.0 ~ 29.6 Vdc	
Rated Output Wattage	60.0 W (At full load and any line)	
Line Regulation	± 2% Maximum	
Load Regulation	± 5% Maximum	
Efficiency	> 82%	
Output Short Circuit Protection	Can be Shorted without damage and auto recovery	
With Reverse Polarity Protection		
For LiFePO4 battery, Auto selected (Switch press 3s, change the Lead acid Battery mode into LiFePO4 battery mode)		
Normal Output	12.8 V 5.0 A / 25.6 V 2.5 A	
Limited Charging Voltage	14.8 Vdc / 29.6 Vdc Maximum	
Rated Output Wattage	60.0 W (At full load and any line)	
Line Regulation	± 2% Maximum	
Load Regulation	± 5% Maximum	
Efficiency	> 82%	
Output Short Circuit Protection	Can be Shorted without damage and auto recovery	
With Reverse Polarity Protection		













Reliability	
Hi-Pot Testing Voltage	I/P to O/P: 3.0 (60sec) KVac
Safety Standard	EN60335-2-29
EMI Standard	EN55022B

Mechanical Characteristics	
Case	Desktop IP64
Case Size	152*79*45.5 mm (L*W*H)
Input Co	Europe Two Round Pins
	1.0 m 18# with changeable plug
Output Cable	0.5 m extra cable with alligators
	0.5 m extra cable with rings

Packing	
White Box Size	225*106*85 mm (L*W*H)
Carton Quantity	24 pcs
Carton Size	470*445*285 mm (L*W*H)
Gross Weight	About 19.5 kg per carton

LED Instruction Manual	
Charger Connect to 230 Vac	Power LED indicate Green
Charging	Charging LED indicate Red
Charging Status	LED Power indicate Green when up 25%, 50%, 75% 100% power Full Charged: Full LED indicate Green
For Lead Acid Battery	Boost LED / 12V LED / 24V LED LED indicate Orange Winter LED / Summer LED indicate Orange
For LiFePO <sub>4</sub> Battery	LiFePO <sub>4</sub> LED indicate Orange

Lead Acid Battery Charging	
LED Indication	Status
12V or 24V LED	ON
Boost LED	OFF
Winter or Summer LED	ON
LiFePO <sub>4</sub> LED	OFF

LiFePO <sub>4</sub> Battery Charging	
LED Indication	Status
12V or 24V LED	ON
Boost LED	OFF
Winter or Summer LED	ON
LiFePO <sub>4</sub> LED	ON











## **Product Drawing**















