





40A MPPT Solar Charge Controller

MODEL: RS-MPPT40P

FEATURES AND ADVANTAGE

- True MPPT, the Latest Algorithm
- Tracking Efficiency Above 99.5%
- Charge Conversion Efficiency as Higher as 98%
- 12V / 24V DC System Self-Adaptation
- Reverse Discharge Protection
- Targeted for Accurate CUSTOM Setting
- Over Voltage Protection
- Common Negative Connection
- Charging Data Storage
- Internal Bluetooth-Optional
- External Battery Temp Sensor-Optional
- Conformal Coating For Inside Board
- External Digital Remote Display-Optional
- In-house Design And Manufacture
- Extensive Internal Electronics In-Circuit Protections And Safety Protections
- Targeted For Lead Acid Batteries: Gel, AGM, WET, CRYSTAL, CALCIUM Batteries Type Selections
- Targeted For Lithium Batteries: LiFePO4, LTO (Lithium Titanium Oxide), LCO Batteries Type Selections

UNIQUE PERFORMANCE

- Splash Proof IP43
- 8+1 Battery Type Option
- Rubber Mask For Connectors Protection
- Unique Charge Management Technology For Safe And Optimized Charge
- Unique Multiple Peaks Detected Technology For Maximum **Power Point Tracking**



- Housing Enclosure In Patent Application
- Large and Informative LCD Display To Show Solar, Battery And Setting Parameters
- Unique Fully Discharged Battery Recovery Or Re-Start For Lead Acid or Lithium Battery
- Unique and Concise LED Bar / Transparent Windows Indications In Patent Application

SPECIFICATIONS

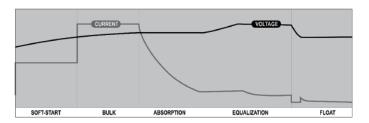
System Nominal Voltage	12/24V Auto		
Max. PV Open Circuit Voltage	100VOC		
Charging Technology	MPPT		
Max. PV Charging Current	40A		
Max. Recommended PV Input Power	600 Watt (12V) / 1200 Watt (24V)		
Battery Type Preset	Crystal, Gel, AGM, WET, Calcium / LCO, LFP, LTO		
Housing Case Color	Black / Grey		
IP Grade	IP43 for Inside PCBA, IP22 for Connection Area		
Net Weight	1.17kg / 2.58lb		
Dimensions (L*W*H)	195*142*74 mm / 7.7*5.5*2.9 in		



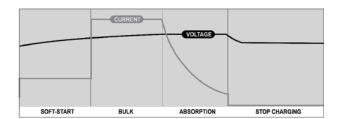
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CHARGING MANAGEMENT

For Lead Acid Battery (Crystal, GEL, AGM, WET And Calcium Battery): Soft Charge – Bulk Charge – Absorption Charge – Equalizing Charge* – Float Charge



For Lithium Battery (LCO, LFP, LTO Battery): Soft Charge – Bulk Charge – Absorption Charge – Stop and Restart Charge*



LED INDICATIONS

Normal Charge

LED Indications	==	4		• •		
LED Color	Green	Blue	White	White	White	White
Soft-Start	ON	Flash	Flash	OFF	OFF	OFF
Bulk Charge	ON	ON	ON	Flash	OFF	OFF
Absorption / Equalization	ON	ON	ON	ON	ON	Flash
Float Charge	ON	OFF	ON	ON	ON	ON

Abnormal Charge

Solar Panel Abnormal Mode	LCD Display	LED Indication	LCD Backlight
Solar Panel Weak <15V	/	Flash ON	ON
Solar Panel Reverse Connection	<u> </u>	H	Flash
Solar Panel Over Voltage (> 95V)	<u>-</u> P-02	Flash Flash	Flash

Battery Abnormal Mode	LCD Display	LED Indication	LCD Backlight	
Solar Panel is Connected, Battery Disconnected	<u>= b-01</u>	■ ■ ■ ■	Flash	
Battery Reverse Connection	= b - 02	B I I	Flash	
Battery Over Voltage Than > 17V	=b - 03	Flash Flash Flash	Flash	
Battery Temperature Over 65°C	<u>= 6-04</u>	Flash Flash Flash	Flash	
The Controller Over Temperature Protection		1 1 1 0 _{0N}	Flash	