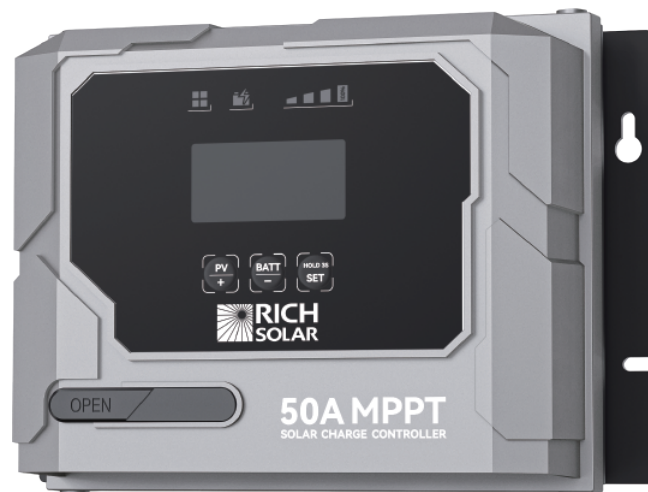


# 50A MPPT Solar Charge Controller

**MODEL: RS-MPPT50P**

## 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: LiFePO<sub>4</sub>, LTO (Lithium Titanium Oxide), LCO Batteries Type Selections



## UNIQUE PERFORMANCE

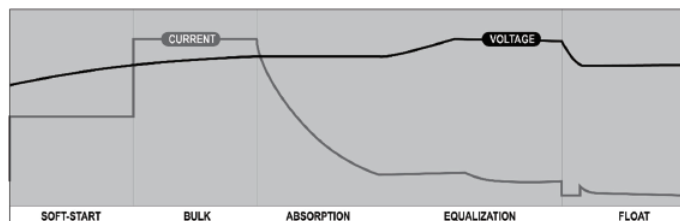
- Splash Proof IP43
- 8+1 Battery Type Option
- Rubber Mask For Connectors Protection
- Unique Charge Management Technology For Safe And Optimized Charge
- Unique Multiple Peaks Detected Technology For Maximum Power Point Tracking
- Housing Enclosure In Patent Application
- Large and Informative LCD 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

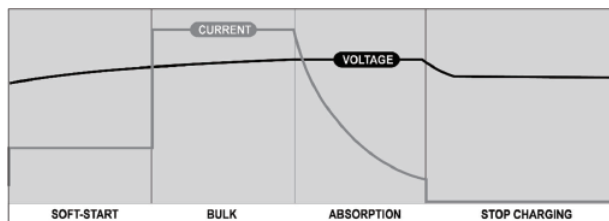
System Nominal Voltage	12/24V Auto
Max. PV Open Circuit Voltage	100VOC
Charging Technology	MPPT
Max. PV Charging Current	50A
Max. Recommended PV Input Power	700 Watt (12V) / 1400 Watt (24V)
Battery Type Preset	Crystal, Gel, AGM, WET, Calcium / LCO, LFP, LTO
Housing Case Color	Black / Grey
IP Grade	IP43 for Inside PCBA, IP22 for Connection Area
Net Weight	1.40kg / 3.09lb
Dimensions (L*W*H)	195*140*74 mm / 7.7*5.5*2.9 in

## 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\*

























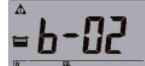



















## LED INDICATIONS

### Normal Charge

LED Indications						
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	/	    	ON
Solar Panel Reverse Connection		    	Flash
Solar Panel Over Voltage (> 95V)		    	Flash

Battery Abnormal Mode	LCD Display	LED Indication	LCD Backlight
Solar Panel is Connected, Battery Disconnected		   	Flash
Battery Reverse Connection		   	Flash
Battery Over Voltage Than > 17V		   	Flash
Battery Temperature Over 65°C		   	Flash
The Controller Over Temperature Protection		   	Flash