

# MPPT Solar Charge Controller

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- MS2420N
- MS2430N
- MS2440N
- MS4820N
- MS4830N
- MS4840N

## MPPT Solar Charge Controller - BT APP Negative Grounded Model / Touch Screen Operation



### Key Figures

- Aluminum casing + tempered glass cover
- Touch screen operation
- Battery system auto recognition
- 100Voc / 150Voc max PV input voltage
- 20A / 30A / 40A max charge current
- 300 days max data logging
- Negative grounded design
- Inbuilt BT module for APP operation

MS is a series of controllers with the most advanced MPPT technology, mainly used in medium size solar stand alone power system. MS supports solar charge only, for battery system 12/24/36/48V. It is negative grounded design, and with Bluetooth module built inside for APP monitoring and operation in mobile phone.

### Advanced Maximum Power Point Tracking (MPPT) Technology

- Fast MPPT start with ultra fast of sweeping of the entire V-I curve
- Smart MPPT algorithm ensures a better tracking in multiple power points
- High PV harvest performance in weak sunlight conditions
- Excellent peak efficiency exceeds 98%

### High Quality & Functions

- Aluminum casing for better cooling and charge function in high temperature
- Tempered glass cover, touch screen button for better operation
- Polyurethane filled inside for better cooling and waterproof
- Over rating electronic components to minimize the power loss from heating
- Full charge power output up to 45°C
- Compensates battery charge voltages with use of temperature sensor
- LCD screen display
- Lead-acid AGM/GEL/Flooded & Lithium batteries supportable

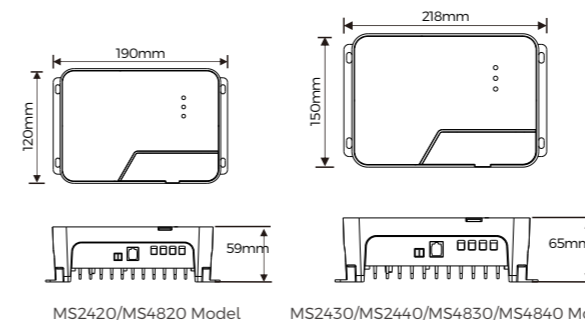
### Reliable Electronic Protections

- Advanced protections for battery charge
- Over-heating protection by power derating if temperature is high
- Allow max 25% exceeding rated power without controller damage
- Extensive protections including PV reverse polarity & reverse current protection

### Extensive Device Functions

- RS485 port for Modbus communication
- External port for multiple devices parallel use
- External Bluetooth module connection for APP operation
- External remote LCD display connection

Controller Parameter	Value					
Model No.	MS2420N	MS2430N	MS2440N	MS4820N	MS4830N	MS4840N
System Wiring	Negative Grounded					
Grounded						
Battery System Voltage	12V/24V Auto(FLD/GEL/SLD) Manual (Li/User)			12/24/36/48V Auto(FLD/GEL/SLD) Manual (Li/User)		
No-load Loss	12mA/12V ; 10mA/24V			12mA/12V;10mA/24V;8mA/36V;6mA/48V		
Max Solar Input Voltage	<100Voc			<150Voc		
Rated Solar Charge Current	20A	30A	40A	20A	30A	40A
Max Solar Input Power	300W/12V 600W/24V	450W/12V 900W/24V	600W/12V 1200W/24V	300W/12V 600W/24V 900W/36V 1200W/48V	450W/12V 900W/24V 1350W/36V 1800W/48V	600W/12V 1200W/24V 1800W/36V 2400W/48V
Operating Temperature	-35°C ~ +45°C					
IP Protection	IP34					
Net Weight	1.0 kg	2.0 kg	2.0 kg	1.1 kg	2.1 kg	2.1 kg
Communication Port	RS485+Bluetooth(APP)					
Operating Altitude	≤ 3000 meters					
Controller Dimension	190*120*59mm	218*150*65mm		190*120*59mm	218*150*65mm	
Battery Voltages		Battery Parameters				
Battery Types	FLD	SEL	GEL (default)	USER (adjustable)	LI (adjustable)	
Equalize Charge Voltage	14.8V*n	14.6V*n	-	Default	-	
Boost Charge Voltage	14.6V*n	14.4V*n	14.2V*n	Default: GEL	Default: 14.2V*n	
Float Charge Voltage	13.8V*n			Default: GEL	-	
Boost Charge Recovery Voltage	13.2V*n			Default: GEL	-	
Over-discharge Recovery Voltage	-			-	-	
Over-discharge Voltage	-			-	-	
Auto Temperature Compensation	-3mV/2V/°C			Default: GEL	-	
Accessory List		Package Status				
External Temperature Sensor						Yes
Remote LCD Meter						Optional
Bluetooth Module						Yes/Inbuilt
Parallel Charge Use Cable						Optional
Installation Guidance Paper						Yes
User Manual						Yes



### Accessories



### App



PV Charge Pro