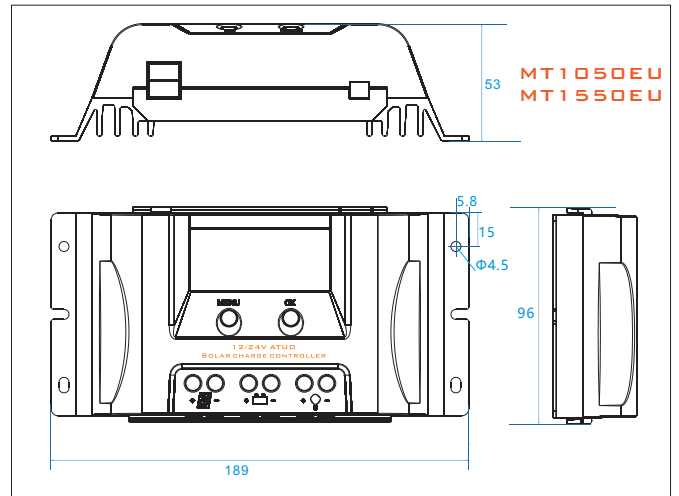
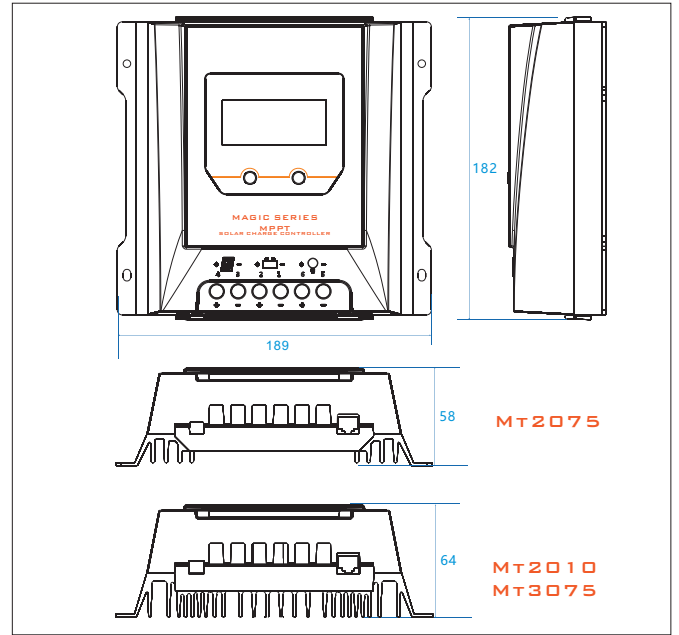


Magic series

MPPT Solar charge controller

10/15/20/30/40A



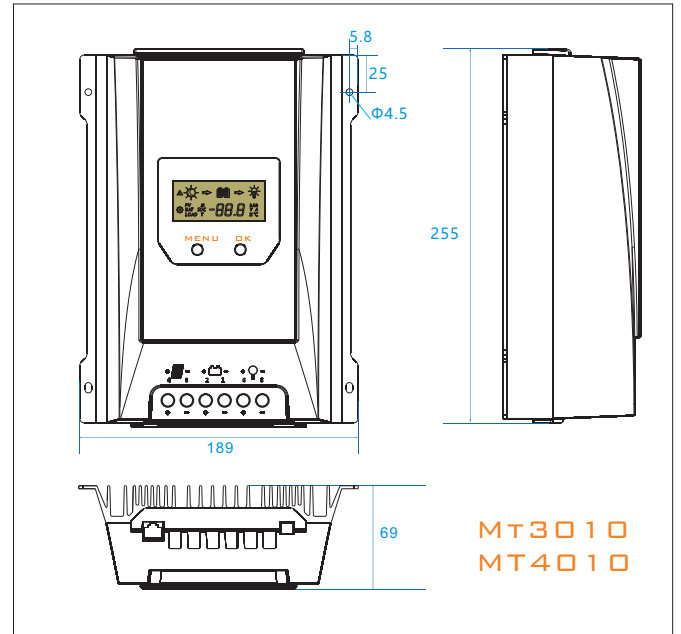
MPPT, LCD display , RS485, 12/24V system voltage

- Innovative MPPT technology, tracking efficiency 99.9%, conversion efficiency up to 97%
- Real-time display the operational data and working status of the controller in digital, graphic and textual forms by a large LCD
- AGM, Gel, Liquid battery to choose
- Two navigation buttons, easy to implement various operations
- 12V/24V automatic recognition, Temperature compensation, Perfect EMC design
- Four stage charge way: MPPT, boost, equalization, float
- Full automatic electronic protect function

Magic series

MPPT Solar charge controller

10/15/20/30/40A



MPPT, LCD display , RS485, 12/24V system voltage

- Innovative Max Power Point Tracking(MPPT) technology, tracking efficiency >99%
- Full digital technology, high charge conversion efficiency up to 98%
- LCD display design, read operating data and working condition easily.
- Real-time energy statistics function.
- 12V/24V automatic recognition
- AGM,Liquid and GEL battery for selection
- External temperature sensor, automatic temperature compensation
- Built-in temperature sensor, when the temperature exceeds the set value, the charging current will lower down followed by the decrease of temperature, so as to control the controller' s temperature rise
- Four stages charge way: MPPT, boost, equalization, float
- With current-limiting charging mode, when the power of solar panel is over-sized and charging current exceeds the rated current, the controller will lower the charging power, which enables the system to work under the rated charging current
- Multiple load control modes: Standard, Dusk to Dawn, Timer and User-defined mode.
- Based RS-485 standard Modbus protocol, to maximize their communication needs of different occasions.
- Perfect EMC & thermal design
- Full automatic electronic protect function

Magic series

MPPT Solar charge controller

10/15/20/30/40A

Datasheet

	Item	MT1050EU	MT1550EU	MT2075	MT3075	
Battery Parameters	System Voltage	12V		12/24V auto		
	Max Charging Current	10A	15A	20A	30A	
	MPPT Charging Voltage	<14.5V@25°C		<14.5/29.0V@25°C		
	Boost Voltage	14.5V@25°C		14.5/29.0V @25°C		
	Equalization Voltage	14.8V@25°C		14.8/29.6V @25°C (Liquid)		
	Float Voltage	13.7V@25°C		13.7/27.4V @25°C		
	Low Volt. Disconnect	10.8~11.8V, SOC1~5		10.8~11.8/21.6~23.6V, SOC1~5		
	Reconnect Voltage	11.6~12.8V		11.6~12.8V/23.2~25.6V		
	Overcharge Protect	15.5V		15.5/31.0V		
	Max volt on Bat. terminal	20V		35V		
	Temp. Compensation	-4.17mV/K per cell (Boost, Equalization) , -3.33mV/K per cell (Float)				
	Battery Type	Gel, AGM, Liquid				
Panel Parameters	Max volt on PV terminal	45V	35V	55V	*1	
	Max input power	130W	200W	260/520W	390/780W	
	Dusk/Dawn detect volt.	8.0V		8.0/16.0V		
	MPPT tracking range	(Battery Voltage + 1.0V) ~Voc*0.9				*2
Load	Output Current	10A		20A	30A	
	USB interface	5V, 2A		—		
	Work mode	Standard, D2D, Street lamp, User-defined mode				
System Parameters	Max tracking efficiency	>99.9%				
	Max charge conversion	97.5%		98.0%		
	Dimensions(mm)	189 * 96 * 53		189 * 182 * 58	189 * 182 * 64	
	Weight	420g		1Kg	1.3Kg	
	Self consumption	7mA				
	Ambient temperature	-20 ~ +55°C				
	Storage temperature	-25 ~ +80°C				
	Ambient humidity	0 ~ 100%RH				
	Protection degree	IP32				
Max Altitude	4000m					

*1.This value represents the maximum voltage of the solar panel at the minimum operating ambient temperature.

*2.Voc means the open circuit voltage of the solar panel.

Magic series

MPPT Solar charge controller

10/15/20/30/40A

Datasheet

	Item	MT2010	MT3010	MT4010
Battery Parameters	Max Charging Current	20A	30A	40A
	System Voltage	12V/24V automatical recognition		
	MPPT Charging Voltage	< 14.5/29.0V@25°C		
	Boost Voltage	14.5/29.0V @25°C		
	Equalization Voltage	14.8/29.6V @25°C (Liquid)		
	Float Voltage	13.7/27.4V @25°C		
	Low Volt. Disconnect	10.8~11.8V/21.6~23.6V, SOC1~5		
	Reconnect Voltage	11.6~12.8V/23.2~25.6V		
	Overcharge Protect	15.5/31.0V		
	Max volt on Bat. terminal	35V		
	Temp. Compensation	-4.17mV/K per cell (Boost, Equalization) , -3.33mV/K per cell (Float)		
	Battery Type	Gel, AGM, Liquid		
Panel Parameters	Max volt on PV terminal	100V		*1
	Max input power	260/520W	390/780W	520/1040W
	Dusk/Dawn detect volt.	8.0/16.0V		
	MPPT tracking range	(Battery Voltage + 1.0V) ~Voc*0.9		*2
Load	Output Current	20A	30A	
	Work mode	Standard, D2D, Street lamp, User-defined mode		
System Parameters	Max tracking efficiency	> 99.9%		
	Max charge conversion	98.0%		
	Dimensions(mm)	189 * 182 * 64	189 * 255 * 69	
	Weight	1.3Kg	2Kg	
	Self consumption	7mA		
	Ambient temperature	-20 ~ +55°C		
	Storage temperature	-25 ~ +80°C		
	Ambient humidity	0 ~ 100%RH		
	Protection degree	IP32		
Max Altitude	4000m			

*1. This value represents the maximum voltage of the solar panel at the minimum operating ambient temperature.

*2. Voc means the open circuit voltage of the solar panel.