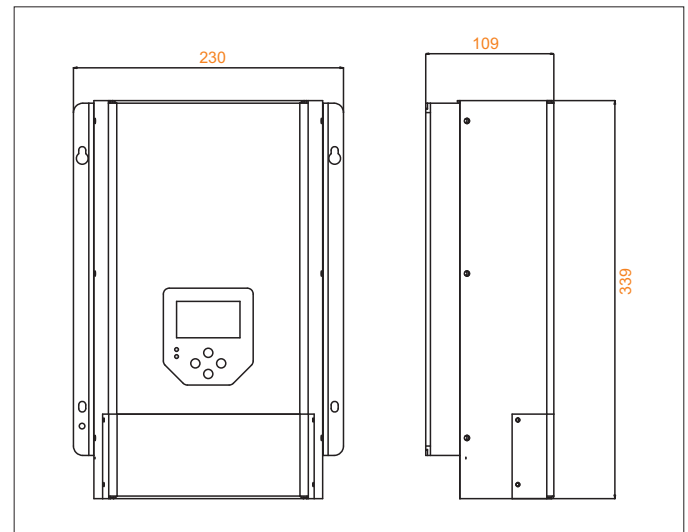


Magic series MPPT Solar charge controller

60A



- Innovative Max Power Point Tracking(MPPT) technology, tracking efficiency >99.9%
- Full digital technology, high charge conversion efficiency up to 98%
- LCD display design, read operating data and working condition easily
- LCD can display latest daily/monthly/yearly charging data, total 5 years
- 12/24/48V automatic recognition
- Liquid, Gel, AGM and Lithium battery for selection
- The separate ports for remote temperature sensor and voltage sensor, make battery temperature compensation and voltage detection more accurate
- Automatic over-temperature power reduction function
- Relay control the switching signals of external loads and chargers, for hybrid power supply system of solar energy and utility electricity or gas generation
- Dual automatic restriction function when exceeding rated Charging Power and Charging Current
- Storage of 5-year battery voltage and historical charging data
- Android APP version for Bluetooth communication
- IoT Wireless or RS-485 Communication Functions Optional
- Monthly charging data can be calculated and displayed by grouping and graphs
- Modbus protocol based on RS-485 standard for remote communication need
- Multi-functional AUX port can meet customized requirements
- Common positive design, suitable for telecom applications
- Perfect EMC & thermal design
- Full automatic electronic protect function

Magic series

MPPT Solar charge controller

60A

Datasheet

		MT6020-Pro
Battery Parameters	System Voltage	12V/24/48V automatical recognition
	Max Charging Current	60A
	MPPT Charging Voltage	< 14.5V/29.0V/58.0V @25°C
	Boost Voltage	14.5V/29.0V/58.0V @25°C
	Equal Voltage	14.8V/29.6V/59.2V @25°C (Liquid, AGM)
	Float Voltage	13.7V/27.4V/54.8V @25°C
	Low Voltage Disconnect	10.8-11.8V/21.6~23.6V/43.2~47.2V, SOC1~5
	Reconnect Voltage	11.6-12.8V/23.2~25.6V/46.4~51.2V
	Overcharge Protect	15.5V/31.0V/62.0V
	Max Voltage on Battery Terminal	65V
	Temperature Compensation	-4.17mV/K per cell (Boost, Equal), -3.33mV/K per cell (Float)
	Battery Type	Liquid, GEL, AGM, Lithium
Panel Parameters	Max Voltage on PV Terminal(-20°C)	200V
	Max Voltage on PV Terminal(25°C)	180V
	Max Input Power	780/1560/3120W
	MPPT Tracking Range	(Battery Voltage+2V) ~ Voc*0.9
	Max Tracking Efficiency	>99.9%
	Max Charge Conversion	98%
	Full Load Efficiency	97.5%
System Parameters	Dimensions	339*230*109mm
	Mounting Dimensions	220*215mm
	Mounting Hole Size	φ6mm
	Terminals	2AWG (35mm ²)
	Recommended Cable	6AWG (16mm ²)
	Communication	BLE(Default), IoT, RS485 (RJ11 interface)
	Grounding	Common Positive
	Historical Data Preservation	5 years
	Ambient Temperature	-20 ~ +50°C
	Storage Temperature	-25 ~ +70°C
	Ambient Humidity	5~95%RH
	Protection Degree	IP20
Max Altitude	4000m	