

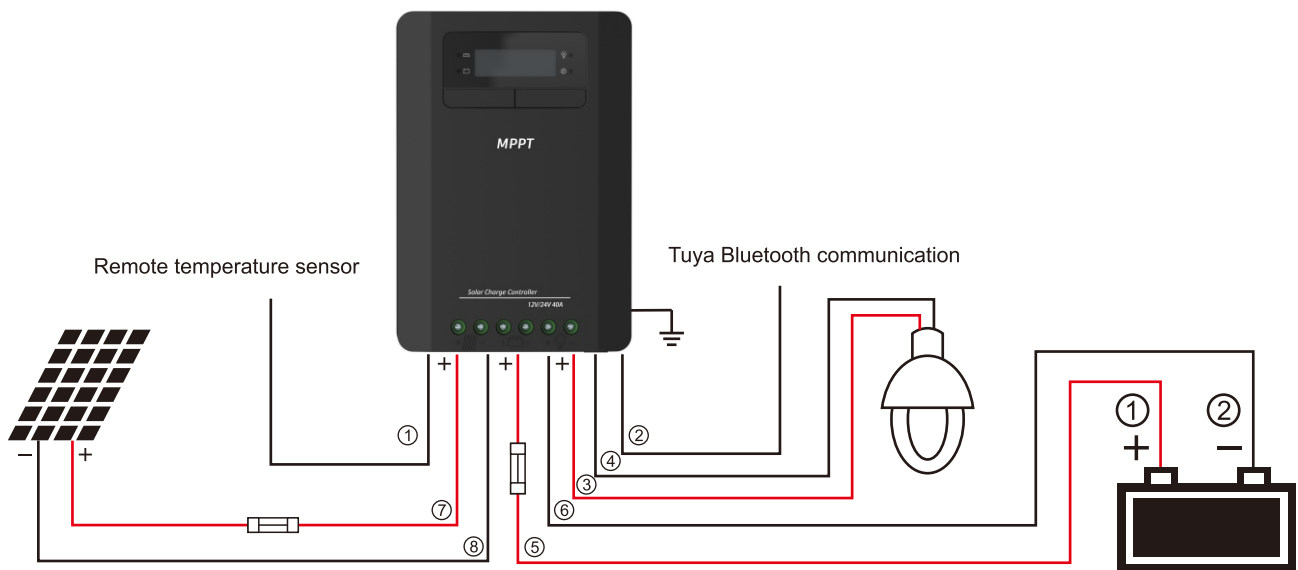
NVMC Series 40A Bluetooth MPPT Solar Controller

Product Introduction

NVMC series solar controller is based on an advanced maximum power point tracking (MPPT) technology developed, dedicated to the solar system, the controller conversion efficiency up to 98%.

Parameter

- 12/24V automatic recognition
- Tuya SmartLife APP for Bluetooth communication
- Real-time energy statistics function
- LCD display design, read operating data and working condition easily
- Flexible System battery selection: Liquid, Gel, AGM and Lithium
- Extends battery life through accurate remote temperature sensor Controller is protected against over-temperature due to built-in power reduction function
- Four stages battery charging process: MPPT, boost, equalization, float
- Dual automatic protection to avoid exceeding the rated charging power and current
- Multiple load control modes: Always on, Dusk to Dawn, Evening and Manual
- Based RS485 standard Modbus protocol with RJ11 interface to maximize the communication needs of different occasions.



Specification

	Item		NVMC4010
Battery Parameters	Max Charging Current		40A
	System Voltage		12/24V automatic recognition
	Battery Type		Gel, AGM, Liquid, Lithium (default: Gel)
	Max volt on Bat. terminal		35V
	Gel, AGM, Liquid	MPPT Charging Voltage	before boost or equalization charging stage(default: 14.5/29V)
		Boost Voltage	14~14.8/28~29.6V @25°C(default: 14.8/29.6V)(Liquid, AGM)
		Equalization Voltage	14~15.0/28~30V@25°C(default: 13.7/27.4V)
		Float Voltage	13~14.5/26~39V @25°C
		Low Volt. Disconnect	10.8~11.8V/21.6~23.6V(default: 11.2/22.4V)
		Reconnect Voltage	11.4~12.8V/22.8~25.6V (default: 12.0/24.0V)
		Overcharge Protect	15.8/31.3V
	Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)	
	Lithium	Charging target voltage	10.0~32.0V(Lithium, default: 14.4V)
		Charging recovery voltage	9.2~31.8V(Lithium, default: 14.0V)
Low voltage disconnect		9.0~30.0V(Lithium, default: 10.6V)	
Low voltage reconnect		9.6~31.0V(Lithium, default: 12.0V)	
Panel Parameters	Max volt on PV terminal *1		100V (-20°C) , 90V (25°C)
	Max input power		520/1040W
	Day/Night threshold		3.0~10.0/6.0~20.0V(Default: 8/16V)
	MPPT tracking range *2		(Battery Voltage + 2.0V) ~Voc*0.9
Load Parameters	Output Current		30A
	Load mode		Always on, Street lamp, User-defind Mode(default: Always on)
System Parameters	Max tracking efficiency		>99.9%
	Max charge conversion		98.0%
	Dimensions		195*135*67.1mm
	Weight		1.3Kg
	Self consumption		≤12mA
	Communication		RS485(RJ11 interface)
	Optional		IoT, BLE(Internal/External)
	Grounding		Common Negative
	Power terminals		6AWG(16mm2)
	Ambient temperature		-20~+55°C
	Storage temperature		-25~+80°C
	Ambient humidity		0~100%RH
	Protection degree		IP32
	Max Altitude		4000m

