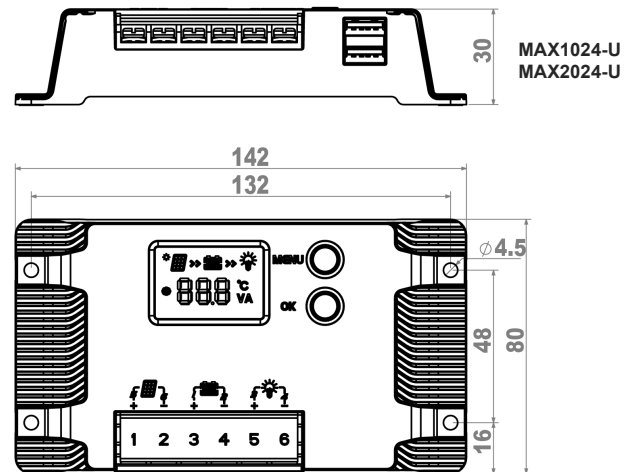


MAX series Solar Controller



Dimensions

Unit:mm

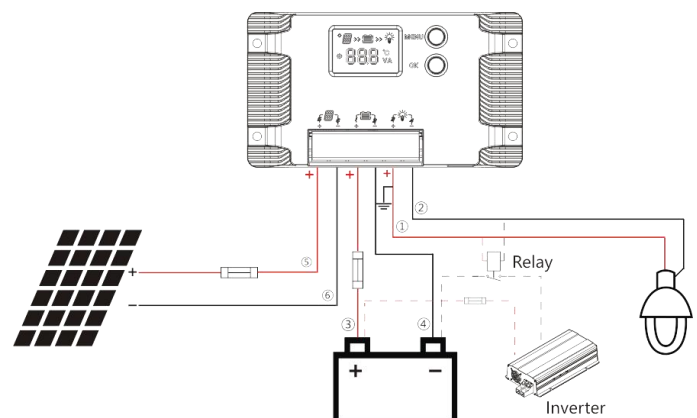


Dear customer,

Thank you for purchasing our MAX series solar controller. This product manual provides some important advice related to the controller, including installation, programming and troubleshooting. Please read this manual carefully before using this product.

Outstanding features:

- 12/24 automatic recognition.
- Perfect EMC & thermal design.
- Full automatic electronic protect function.
- Flexible System battery selection: Liquid, Gel, AGM and Lithium.
- Equipped with lithium battery activation function.
- LCD display design, read operating data and working condition easily.
- Built-in over-temperature protection mechanism; charging and discharging stop when the temperature exceeds the set value.
- Lead-acid battery charging in four stages: fast charge, boost charge, equalization charge, float charge.
- PWM charging is programmable to prevent system failure caused by BMS.
- Short-circuit protection is programmable to prevent output shutdown when disconnecting the capacitive or inductive loads.
- Small size, PID algorithm adopt to control the voltage output, make the control more stable and accurate.
- The visual control point voltage and charging voltage can be set.



Technical Parameters

	Item	MAX1024	MAX2024
Battery Parameters	Max Charging Current	10A	20A
	System Voltage	12/24VDC or automatic recognition	
	Max volt on Bat. terminal	35V	
	Battery Type	Gel/Liquid/AGM(default: Gel)	
	Lithium battery type	LiFePO ₄ / NCM lithium battery/Customize	
	Liquid, Gel and AGM	Fast Charging Voltage	<14.5/29.0V@25°C
		Boost Voltage	14.0~14.8V/28.0~29.6V@25°C(default: 14.5/29.0V)
		Equalization Voltage	14.3~15.1V/28.6~30.2@25°C (default: 14.8/29.6V) (Liquid,, AGM)
		Float Voltage	13.2~14.0V/26.4~28.0V @25°C(default: 13.7/27.4V)
		Low Volt. Disconnect	10.8~11.8V/21.6~23.6V(default: 11.2/22.4V)
		Overcharge Protect	15.8/31.3V
		Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)
	Lithium	Boost Voltage	LI: 10.1~20.1V; LI3/LI4: 12.0~14.8V
		Low voltage disconnect	LI: 9.0~17.0V; LI3: 9.0~11.4V; LI4: 9.0~13.1V
Panel Parameters	Max volt on PV terminal	25V@12V;50V@24V	
	Dusk/Dawn detect volt.	3.0~10.0V/6.0~20.0V(default: 8.0/16.V)	
Load	Output Current	10A	20A
	USB interface	No	
	Load mode	24H(Default) , D2D, Night working mode, Daytime working mode, User-defind Mode	
System Parameters	Dimensions	80*142*30mm	
	Net weight	136g	168g
	Self consumption	6~10mA	
	Grounding	Common Positive	
	Power terminals	8AWG(10mm ²)	
	Ambient temperature	-20~+45°C	
	Storage temperature	≤95% RH, No condensation	
	Protection degree	-25~+70°C	
	Max Altitude	IP32	

* Around oblique line value separately on behalf of 12V and 24V system's value.

Technical Parameters

	Item	MAX1024-U	MAX2024-U
Battery Parameters	Max Charging Current	10A	20A
	System Voltage	12/24VDC or automatic recognition	
	Max volt on Bat. terminal	35V	
	Battery Type	Gel/Liquid/AGM(default: Gel)	
	Lithium battery type	LiFePO ₄ / NCM lithium battery/Customize	
	Liquid, Gel and AGM	Fast Charging Voltage	<14.5/29.0V@25°C
		Boost Voltage	14.0~14.8V/28.0~29.6V@25°C(default: 14.5/29.0V)
		Equalization Voltage	14.3~15.1V/28.6~30.2@25°C (default: 14.8/29.6V) (Liquid,, AGM)
		Float Voltage	13.2~14.0V/26.4~28.0V @25°C(default: 13.7/27.4V)
		Low Volt. Disconnect	10.8~11.8V/21.6~23.6V(default: 11.2/22.4V)
		Overcharge Protect	15.8/31.3V
		Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)
	Lithium	Boost Voltage	LI: 10.1~20.1V; LI3/LI4: 12.0~14.8V
		Low voltage disconnect	LI: 9.0~17.0V; LI3: 9.0~11.4V; LI4: 9.0~13.1V
Panel Parameters	Max volt on PV terminal	25V@12V;50V@24V	
	Dusk/Dawn detect volt.	3.0~10.0V/6.0~20.0V(default: 8.0/16.V)	
Load	Output Current	10A	20A
	USB interface	5V/2A(Maximum)	
	Load mode	24H(Default) , D2D, Night working mode, Daytime working mode, User-defind Mode	
System Parameters	Dimensions	80*142*30mm	
	Net weight	146g	178g
	Self consumption	6~10mA	
	Grounding	Common Positive	
	Power terminals	8AWG(10mm ²)	
	Ambient temperature	-20~+45°C	
	Storage temperature	≤95% RH, No condensation	
	Protection degree	-25~+70°C	
	Max Altitude	IP32	

* Around oblique line value separately on behalf of 12V and 24V system's value.