

Datasheet

Intelligent 8A MPPT Solar Charge Controller

WI-PS301-UPS



Overview

WI-PS301-UPS is an intelligent solar charge controller that supplies flexible battery types and output voltage ranges. It uses the MPPT control algorithm to track the maximum power point, minimize the maximum power point loss rate and loss time, and ensure the maximum power point tracking efficiency, the corresponding speed, which can track the maximum power point of the photovoltaic array and obtain the energy of the solar panel. At the same time, it has the dual functions of over-voltage protection and over-current protection, as well as over-temperature protection, which fully guarantees the system stability of the product in the access of excess photovoltaic modules and high-temperature operating environment.

Features

MPPT Technology Enhances the Performance of the System

Applying MPPT power tracking technology, the tracking efficiency is higher and faster, so that the system can charge the battery with the highest efficiency. This technology can maximize the power of the panel.

Small and Compact Size

The small size design is easy to install, and it greatly saves internal space in the monitoring box of industrial scenarios and has the performance of anti-drop and waterproof.

Stable Operation in Harsh Environment

It endures temperatures from -20 to 75 degrees Celsius and works in extreme conditions, Making the solar power supply system safe, stable, and long-term operation.

Abundant Security Protection Functions

This controller is equipped with outstanding protection measures, such as over-voltage protection, over-temperature protection, over-current protection, short circuit protection, anti-reverse connection, 6kV surge protection. Even beginners can easily use it without worrying about circuit damage due to misoperation. At the same time, this controller provides a great guarantee for the normal operation of the equipment which can be used in many fields such as RV, household system and field monitoring.

Specifications



Model	WI-PS301-UPS	WI-PS301-UPS		
Hardware Version				
Product Terminal	2 * solar input terminals			
	1 * battery input terminal			
	2 * DC output terminals			
	1 * temperature	1 * temperature sensor terminal		
Max Charge Current	8A			
Solar Panel Input Type	12V or 24V 400W input (Open Circuit Voltage 18V~32V)			
Battery Type	12V lead-acid battery			
	12.6V/14.8V lithium battery			
Power Output	DC 12V 5A Max	DC 12V 5A Max or 24V 3A Max(Switch by DIP)		
LED Indicators	Sun: solar energy input indicator			
	BT: battery status indicator			
	Bin: battery charging indicator			
	Bout: battery discharge indicator			
	25%-100%:battery current percentage indicator			
	DGA: %charge current percentage indicator			
	PW: Power	To the left	Turn on the solar solar controller	
		To the right	Turn off the solar power	
	24V	To the left	The VO terminals with 24V max 3A output	
DIP Switch VI	240	To the right	The VO terminals with 12V max 5A output	
	VI	To the left	Option DC input	
		To the right	Option solar power input	
		To the left	14.8V 100Ah lithum battery, max charge current 8A	
	Lithum battery	To the right	12.6V 100Ah lithum battery, max charge current 8A	
	ВМ	To the left	Choose the 12V 100Ah lithum battery input, max charge current 8A	
		To the right	Choose the 12V 100Ah lead-acid battery, max charge current 8A	
Package Dimensions	205.0 x132.0 x40.0 mm			
Controller Dimensions	120.0x107.0x30.0 mm			
Weight	Net Weight: 0.36 kg			
	Package Weight: 0.46 kg			
Installation	Desktop, Wall-mounted, DIN-rail			



Model	WI-PS301-UPS		
Environmental			
Package Dimension	6kV Surge Protection		
	Over temperature protection		
	Input under voltage and over voltage protection		
	Output under voltage and over voltage protection		
	Reverse polarity protection		
	Output over current and short circuit protection		
Operating Temperature	-20 °C~75°C(-4°F~167°F); 10%~90% (No condensation)		
Storage Temperature	-40 °C~80°C(-40°F~176°F); 5%~90% (No condensation)		
Certification	CE, FCC, RoHS, UKCA, RCM		

Package Contents

Welcome to order our products. After purchasing, you will receive:

WI-PS301-UPS				
Items	Quantity			
Controller	1 pcs			
Mounting Accessory Kit(hangers * 2; screwdriver * 1; Screws * 4)	1 pcs			
Quick Installation Guide	1 pcs			



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