Datasheet

Solar Powered PoE Switch

WI–PS306GF–UPS V4 | WI–PS306GF–UPS–15A V2

New Upgrade: RS–485 for WI–IOT100 to Cloud Management!

Overview

Wi–Tek Solar Powered PoE Switch Serial is designed for CCTV surveillance and wireless network. Based on its green energy, it can be charged by the inexhaustible and natural source of energy – solar power. It can conserve green energy economically and power the remote IP cameras and wireless AP, especially used for expansive applications such as dams, forests, deserts, national parks, and highways.

Features

Built–in MPPT (Maximum Power Point Tracking) Controller

The MPPT (Maximum Power Point Tracker) controller can detect the voltage of the solar panel in real time, track the highest power, and convert the high voltage DC output of the solar panel to the low voltage required for effective charging, so that the system can charge the battery at the maximum power. It is the brain of the photovoltaic system which coordinates with solar panels, batteries and loads in the solar photovoltaic system.

Zero–Carbon, Green and Stable Power Supply

During the day, solar energy can power the communication system and charge the battery, and at night, the battery uses the excess electricity generated by solar energy during the day to power the communication system, which builds a zero–carbon, green and stable communication system without any external energy.

Easy and Intelligent Photovoltaic Power and Battery Status Monitoring

The dashboard in Wi–Tek cloud makes it easy to monitor real–time solar power and battery status, receive battery capacity and charge status alarm, track power generation, power consumption, and battery data.

Wi–Tek Cloud Management

The photovoltaic power and battery status and data of WI–PS306GF–UPS V4 & WI–PS306GF–UPS–15A V2 can be quick configuration, visual management, and remote access in the Wi–Tek through WI–IOT100, which is easy operation and maintenance.

Specifications

Products	WI–PS306GF–UPS	WI–PS306GF–UPS–15A
Hardware Version	V4	V2
Hardware Features		
Interface	1*10/100/1000Mbps PoE++ (Type 3) RJ45 port 2*10/100/1000Mbps PoE+ RJ45 ports 2*10/100/1000Mbps 24V(passive)/48V(af/at) PoE RJ45 ports 1*1000Mbps SFP	
Serial Port	1*RS–485 port	
Power Input Port	6–PIN 5.08mm phoenix connector 1*Solar input,1*DC input 1*Battery charging & discharging	6–PIN 5.08mm phoenix connector 2*Solar input in parallel (compliant DC input but cannot be connected at the same time with solar input to avoid damage to the device) 1*Battery charging & discharging
LED Indicator	Front panel: 1*PW, Power indicator 1*BIN, Battery charging status indicator 1*BOT, Battery discharging status indicator 4*Port PoE status indicators 1*SFP port indicator	
	Rear panel: 1*CPU, System indicator 1*VOT, Power output indicator 1*BIN, Battery charging status indicator 1*BOT, Battery discharging status indicator 1*SIN, Solar power input indicator 1*VIN, DC input indicator	Rear panel: 1*CPU, System indicator 1*VOT, Power output indicator 1*BIN, Battery charging status indicator 1*BOT, Battery discharging status indicator 1*SIN, Power input indicator 1*BS, Battery status indicator
DIP Switch	Front panel: PoE watchdog mode, all PoE ports enable PoE watchdog function, which can detect and reboot the offline compliant PoE powered devices automatically. VLAN mode, all downlink ports are isolated from each other, but can communicate with uplink ports. Extend mode, the data and PoE transmission distance of port 1~5 can be up to 250m. Port 4 and 5 PoE mode, switch 24V passive PoE mode or af/at PoE mode of port 4&5.	
	Rear panel: Switch power on and off. 12V/24V lead acid, 12.6V/25.2V lithium and 14.8V/29.6V Lithium iron phosphate battery type selection.	
Power Consumption	<5W (Without PoE)	

Products	WI–PS306GF–UPS	WI–PS306GF–UPS–15A
Hardware Version	V4	V2
Hardware Features		
Dimensions(W*D*H)	197.3*141.5*34.6mm	
Weight	0.83kg	
Package Dimensions	270*220*67mm	
Package Weight	1.63kg	
Installation	Desktop/Wall mounted	
Fan Quantity	Fan–less	
Material	Metal shell	
Color	Black	
PoE		
PoE Port	Port 1–5	
PoE Standard	Port 1: IEEE 802.3bt (Type 3) Port 2–3: IEEE 802.3af/at Port 4–5: IEEE 802.3af/at or 24V passive PoE	
PoE Pin Assignment	Port 1: 1/2/4/5 (+), 3/6/7/8 (–) Port 2–3: 1/2(+), 3/6(–) Port 4–5: 1/2(+), 3/6(–) @IEEE 802.3af/at PoE or 4/5(+), 7/8(–) @24V passive PoE	
PoE Port Power	60W max for port 1, 30W max for port 2–3, 30W max@ IEEE 802.3af/at or 24W max @24V passive PoE for port 4–5	
PoE Power Budget	65W max for whole switch PoE power budget	120W max for whole switch PoE power budget
Switch Property		
Standards and Protocols	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt	
Forwarding Mode	Store and forward	
MAC Address Table	2k	
Switching Capacity	12Gbps	
Packet Forwarding Rate	8.94Mpps	
Packet Buffer Memory	2.4Mb	
Jumbo Frame	10240Bytes	
Reliability		
ESD Protection	6kV	
Surge Immunity	6kV	
Operating Environment	–20°C to 65°C, 10%~90% (non–condensation)	
Storage Environment	–40°C to 70°C, 5%~90% (non–condensation)	
Other Features		
Cloud Management	The photovoltaic power and battery status and data of WI–PS306GF–UPS V4 & WI–PS306GF–UPS–15A V2 can be quick configuration, visual management, and remote access in the Wi–Tek cloud through WI–IOT100(Solar serial mode).	

Products	WI-PS306GF-UPS					
Hardware Version	V4					
Solar Controller						
Battery Type	Lead acid		Lithium		Lithium iron phosphate	
	12V	24V	12.6V	25.2V	14.8V	29.6V
Battery Capacity	<50Ah					
Charging Mode	PWM					
Consumable Supplement	Support					
Consumable Detection Voltage	<12.6V	<24.8V	<12.2V	<24.4V	<14.2V	<28.8V
Max. Charging Voltage	14.7V	29.6V	12.6V	25.2V	14.8V	29.6V
Rated Charging Current	5A max.					
Float Voltage	13.7V	27.4V	–			
Float Current	50mA–1000mA		–			
Float Time	3hours		–			
Discharge Cut-off Voltage	10.1V	20.2V	9V	18V	10.2V	20.4V
Rated Discharging Current	6.5A	3.6A	8.5A	4A	6.5A	4A
Power input						
Photovoltaic Input	<200W	<400W	<200W	<400W	<200W	<400W
Photovoltaic Open Circuit Voltage	<32V	<45V	<32V	<45V	<32V	<45V
DC Input	15~26V DC@12V battery, 240W input max. 30~36V DC@24V battery, 240W input max.					
Protection						
Protection	Over current protection, Short-circuit protection, Reverse connection protection, PoE over load protection, Over charging protection, Over discharging protection, Delay start, Switch over temperature protection, Battery over temperature protection (with temperature sensor)					

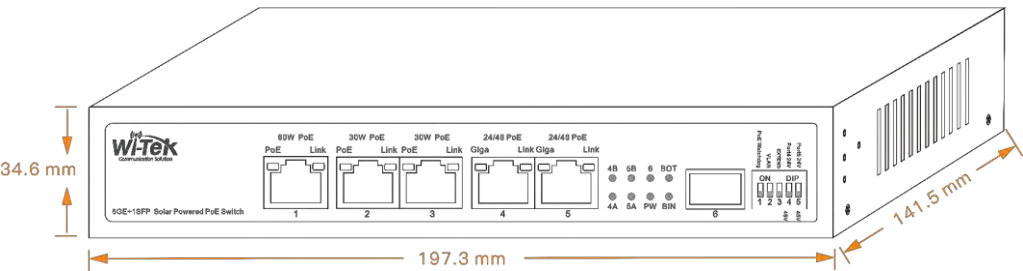* The solar input cannot supply power to the switch independently without the battery connect.

Products	WI–PS306GF–UPS–15A					
Hardware Version	V2					
Solar Controller						
Battery Type	Lead acid		Lithium		Lithium iron phosphate	
	12V	24V	12.6V	25.2V	14.8V	29.6V
Battery Capacity	<500Ah					
Charging Mode	MPPT					
Consumable Supplement	Support					
Consumable Detection Voltage	<12.6V	<24.8V	<12.2V	<24.4V	<14.2V	<28.8V
Max. Charging Voltage	14.7V	29.6V	12.6V	25.2V	14.8V	29.6V
Rated Charging Current	15A max.					
Float Voltage	13.7V	27.4V	–			
Float Current	50mA–1000mA		–			
Float Time	3hours		–			
Discharge Cut–off Voltage	10.1V	20.2V	9V	18V	10.2V	20.4V
Rated Discharging Current	6.5A	3.6A	8.5A	4A	6.5A	4A
Power input						
Photovoltaic Input	<440W	<880W	<380W	<720W	<440W	<880W
Photovoltaic Open Circuit Voltage	<32V	<57V	<32V	<57V	<32V	<57V
Compatible DC Input	15~32V DC@12V battery, 240W input max. 30~57V DC@24V battery, 480W input max. Solar and DC Power can't be connected at the same time to avoid damage to the device.					
Protection						
Protection	Over current protection, Short–circuit protection, Reverse connection protection, PoE over load protection, Over charging protection, Over discharging protection, Delay start, Switch over temperature protection, Battery over temperature protection (with temperature sensor)					

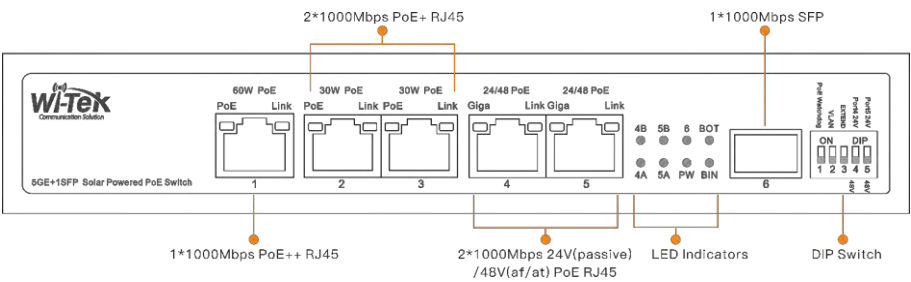* The solar input cannot supply power to the switch independently without the battery connect.

Appearances and Dimensions
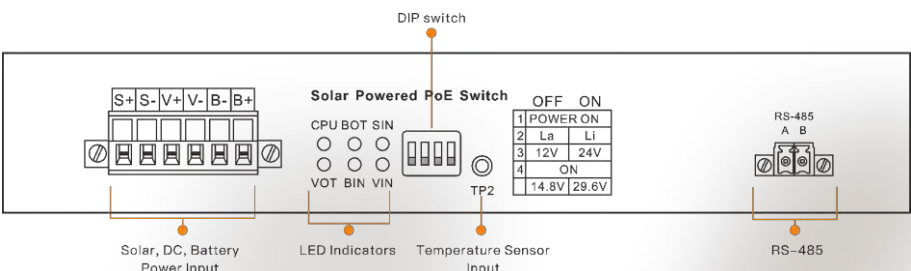
WI-PS306GF-UPS V4 & WI-PS306GF-UPS-15A V2

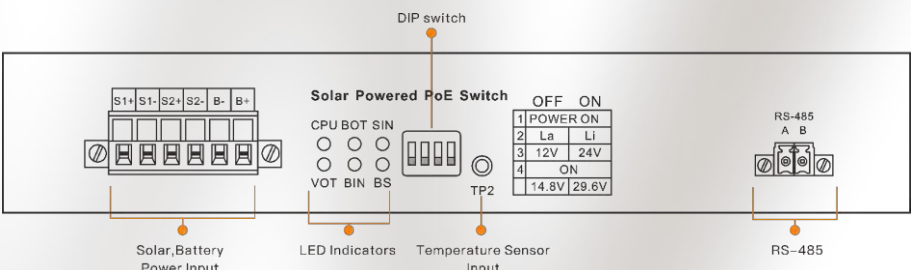### Dimensions

Front Panel

WI-PS306GF-UPS V4 Rear Panel

* The solar input cannot supply power to the switch independently without the battery connect.

WI-PS306GF-UPS-15A V2 Rear Panel

* Solar and DC power can't be connected at the same time to avoid damage to the device.

The solar input cannot supply power to the switch independently without the battery connect.

Package Content

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

Item	Quantity
Switch	1 pcs
24V@5A Power Adapter (Except Australia)	1 pcs
Power Cable (Except Australia)	1 pcs
Mounting Accessories (L-shape bracket, Screw, Screwdriver, Mat)	1 pcs
Quick Installation Guide	1 pcs

CE FC RoHS UK CA

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