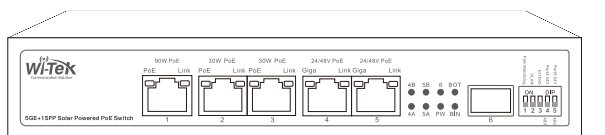




Quick Installation Guide

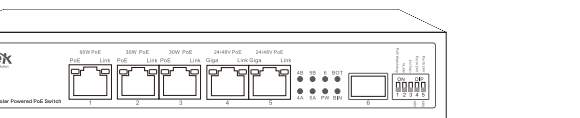
Solar Powered PoE Switch



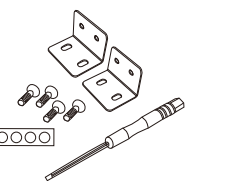
WI-PS306GF-UPS-15A Hardware version V2

www.wireless-tek.com

1. Packing Content



1 x Solar Powered PoE Switch



1 x Mounting Accessories (L-shape bracket, Screw, Screwdriver, Mat)

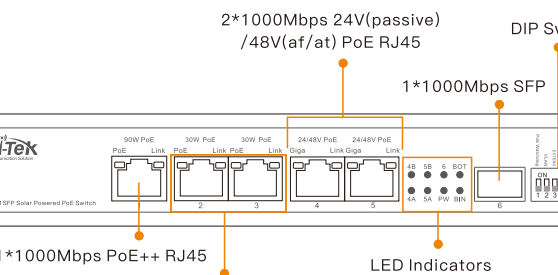


1 x Quick Installation Guide

2. Appearance

WI-PS306GF-UPS-15A (Hardware version V2)

• Front Panel



DIP Switch

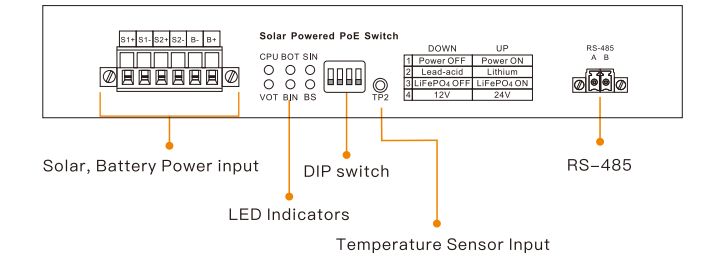
DIP Switch	Status	Description
Switch1: PoE Watchdog	Up	All PoE ports enable PoE watchdog function, which can detect and reboot the offline compliant PoE powered devices automatically.
	Down	Turn off PoE watchdog function
Switch2: VLAN	Up	All downlink ports are isolated from each other, but can communicate with uplink ports.
	Down	Turn off VLAN function and all the ports can communicate with each other.
Switch3: EXTEND	Up	The data and PoE power's transmission distance of port 1-5 can be up to 250m.
	Down	The data and PoE power's transmission distance of port 1-5 can be up to 100m.
Switch4: Port 4 24V/48V PoE Mode	Up	The port 4 works in 24V passive PoE mode.
	Down	The port 4 works in IEEE 802.3af/at PoE mode.
Switch5: Port 5 24V/48V PoE Mode	Up	The port 5 works in 24V passive PoE mode.
	Down	The port 5 works in IEEE 802.3af/at PoE mode.

• LED indicator

LED Indicator	LED Name	Color	Status	Description
PoE	Port PoE indicator	Orange	Steady on	The port is providing power.
			Off	The port is not providing power.
Link	Port PoE indicator	Green	Steady on	A link has been established on the interface.
			Blinking	Data is being transmitted or received on the interface.
			Off	No link is established on the interface.
4A/5A indicator	Port PoE indicator	Green	Steady on	The port 4/5 is providing power in IEEE 802.3af/at PoE mode.
			Steady on	The port 4/5 is providing power in 24V passive PoE mode.
6	SFP indicator	Green	Steady on	A link has been established on the SFP interface.
			On	No link is established on the SFP interface.
PW	Power indicator	Green	Steady on	The system power supply is normal.
			Blinking	The system power supply is normal and the PoE watchdog function is enable.
			Off	The system power supply is abnormal.
BOT	Battery discharging status indicator	Green	Steady on	The battery is discharging and battery capacity is >15%.
			Blinking	The battery capacity is <15%.
			Off	The battery is end of discharge or no discharge.
BIN	Battery charging status indicator	Green	Steady on	The battery is charging and battery capacity is <98%.
			Blinking	The battery is charging and battery capacity is ≥98%.
			Off	The battery is full capacity or not charge.

WI-PS306GF-UPS-15A (Hardware version V2)

• Rear Panel



Power Input	Description
S1+, S1-	Solar power input.
S2+, S2-	Another solar panel in parallel with the solar panel of S1+&S1- socket to obtain greater current input.
B+, B-	Battery power input.

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

DIP Switch	Status	Description	
Switch 1: Power	Up	Power on the device.	
	Down	Turn off the device.	
Switch 2,3,4: Battery type option			
Switch 2	Switch 3	Switch 4	Battery type
Down	Down	Down	12V lead acid battery
Down	Down	Up	24V lead acid battery
Up	Down	Down	11.1V (9V-12.6V) lithium battery
Up	Down	Up	22.2V (18V-25.2V) lithium battery
/	Up	Down	12.8V (10V-14.6V) LiFePO4 battery
/	Up	Up	25.6V (20V-29.2V) LiFePO4 battery

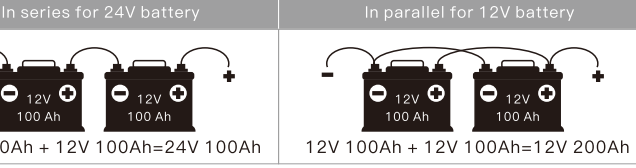
• LED indicator

LED Indicator	LED Name	Color	Status	Description
CPU	System indicator	Green	Steady on	An error has occurred that affects the system.
			1/2s Blinking	The system is running properly.
			1/4s Blinking	Failed to identify the battery.
			Off	The system software is not running.
VOT	Power output indicator	Green	Steady on	The MPPT module is providing power properly.
			Off	The MPPT module is providing power abnormally.
BOT	Battery discharging status indicator	Green	Steady	The battery is discharging and battery capacity is >15%.
			Blinking	The battery capacity is <15%.
BIN	Battery charging status indicator	Green	Steady on	The battery is charging and battery capacity is <98%.
			Blinking	The battery is charging and battery capacity is ≥98%.
			Off	The battery is full capacity or not charge.
SIN	Power input indicator	Green	Steady on	The solar power input is normal.
			1/2s Blinking	The solar power input is in delayed charging, the time is 10 minutes.
			1/4s Blinking	The solar power input is abnormal.
			Off	There is no solar power input.
BS	Battery status indicator	Green	Steady on	The battery capacity is >95%.
			Blinking	The battery capacity is >75% and <95%.
			Off	The battery capacity is <75%.

3. Hardware Installation

Step 1: How to get 12V or 24V battery?

Battery Type	Battery Nominal Voltage	Battery Working Voltage	Battery Max Charge Current
Lead-acid	12V	/	15A
	24V	/	
Lithium	11.1V	9-12.6V	15A
	22.2V	18-25.2V	
LiFePO4	12.8V	10-14.6V	15A
	25.6V	20-29.2V	



Step 2: How to select a suitable solar panel?

WI-PS306GF-UPS-15A	
12V Solar Panel	Maximum Power voltage(Vmp) <32V Open circuit voltage(Voc) <32V
24V Solar Panel	Maximum Power voltage(Vmp) <57V Open circuit voltage(Voc) <57V

Model: 100W Solar Power	
Peak power (Pmax)	(W): 100
Product tolerance (%)	(%): 0-3
Maximum power current (Imp)	(A): 5.32
Maximum power voltage (Vmp)	(V): 18.78
Short circuit current (Isc)	(A): 5.30
Open circuit voltage (Voc)	(V): 22.54
Weight	(kg): 7.2
Dimensions	(mm): 36.4*26.0*1.4
Maximum system voltage (VDC)	: 1000
Maximum series fuse rating	(A): 12
Application class	: A
Mechanical tested	(Pa): 2400
All technical data at standard test condition : AM1.5, G=1000W/m², Tc=25°C	

Step 3: Calculate battery capacity and solar panel power

Recommended tools for reference: UPS Wizard in Wi-Tek Cloud APP

Photovoltaic performance in PVGIS provided by the European Commission

Example: There is 20W load in the solar system

If the system should continue working 1 night and 2 days in the cloudy & raining days, and discharge capacity is 80% (means remain 20% capacity after 2 days), the battery capacity is about

$$20W * (0.6+2) \text{ days} * 24\text{hours} * 1.2 (\text{system loss coefficient}) / 80\% (\text{remain 20\% capacity}) = 1,872 \text{ Wh} = 24V@78Ah \text{ battery}$$

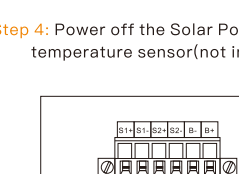
If the battery should be charge full from empty in 3 sunny days, the solar panel is about

$$20W * 24\text{hours} * 2.5\text{days} + 1872 \text{ Wh} / [(3\text{days} * 2.8 (\text{solar panel efficient in days}) * 95\% (\text{conversion efficiency}) * 95\% (\text{system loss})] = 405W = 38V@10.7A \text{ solar panels}$$

Note: the Charging days need to be planned according to local weather. There is much different at system loss coefficient due to battery type, temperature, quality, cycles and so on, and there is much different at solar panel efficiency due to weather, latitude, month, temperature, install slope and azimuth, system loss, cleanliness, quality, degree of aging and so on.

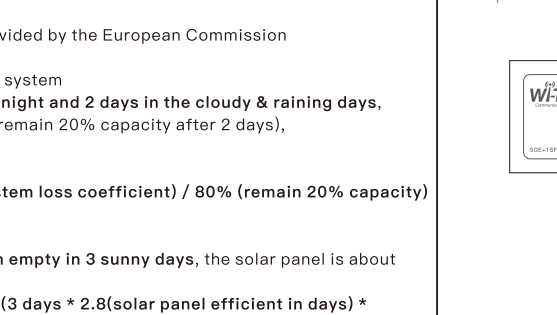
Get some reference, you can visit recommend tools or contact with us for enhanced support.

Step 4: Power off the Solar Powered PoE Switch, connect the solar panel, battery and temperature sensor(not included).



Power Priority: Solar Panel, Battery

Step 5: Connect the 24V passive or 802.3af/at PoE Powered Devices.



Warranty Card

Username	
Address	
Telephone No.	
Purchase Shop	
Purchase Address	
Product Model No.	
Purchase Time	
Serial No.	
Dealer Signature	

- If the product defects within three months after purchase, we will provide you with a new product of the same model.
- If the product defects within the three-year warranty period, we will provide professional maintenance service.
- Proof of purchase and a complete product serial number are required to receive any services guaranteed as part of the limited warranty.
- Any other defects that are not caused by workmanship or product quality, such as natural disasters, water damage, extreme thermal or environmental conditions, sticker damaged, warranty card loss will disqualify the product from limited warranty.



Wireless-Tek Technology Limited
 Address: Building 3, Units 1801-1807, 1812, Huaqing Era Plaza, Tangwei Community, Fuhai Street, Bao'an District, Shenzhen City, Guangdong Province, China.
 Website: www.wireless-tek.com
 Tel: 86-0755-32811290
 Email: sales@wireless-tek.com
 Technical Support: tech@wireless-tek.com

