Quick Installation Guide

Solar Powered PoE Switch

WI-PS306DF-UPS
WI-PS306DF-UPS-15A

Hardware version V2

www.wireless-tek.com

1. Packing Content

1 x Solar Powered PoE Switch

1 x Power Cable
(Europe, Australia)

1 x 24W65A Power Adapter
(Europe, Australia)

1 x Mounting Accessories
(L-shape bracket, Screws, Screwdriver, Nut)

1 x Quick Installation Guide

2. Appearance

- Front Panel

DIP Switch	Mode	Description
Switch1-PoE Watchdog	Up	All PoE ports enable PoE watchdog function, which can detect and reboot non-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.
Switch 3-TXTPQ	Up	The data and PoE power's transmission distance of port 1-5 can be up to 350m.
	Down	The data and PoE power's transmission distance of port 1-5 can be up to 100m.
Switch4- Port 4 SW/480 PoE Mode	Up	Thepport 4 worksin 24V passive PoE mode.
	Down	Thepport 4 worksin IEEE 802.3at/bt PoE mode.
Switch5- Port 5 SW/480 PoE Mode	Up	Thepport 5 worksin 24V passive PoE mode.
	Down	Thepport 5 worksin IEEE 802.3at/bt 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 Link Indicator	Green	Steadyon	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.
48/56	Port PoE Indicator	Green	Steady On	The port 4/5 is providing power in 56W IEEE 802.3at/bt PoE mode.
48/56			Steady On	The port 4/5 is providing power in 24V passive PoE mode.
S	SFP Indicator	Green	Steadyon	A link has been established on the SFP interface.
			Blinking	There is data transmitting or receiving on the SFP interface.
			Off	No link is established on the SFP interface.
PW	Powerindicator	Green	Steadyon	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	Green	Steadyon	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.
SYS	Battery charging status indicator	Green	Steadyon	The battery is charging and battery capacity is >95%.
			Blinking	The battery is charging and battery capacity is ≤95%.
			Off	The battery is full capacity or not charge.

WI-PS306GF-UPS (Hardware version V4)

- Rear Panel

Power Input	Description
S+, S-	Solar power input.
D+, D-	DC power input.
B+, B-	Battery power input.

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	Firmware Upgrade.
			Off	The system software is not running.
MOT	Power output indicator	Green	Steady on	The MPPT module is providing power properly.
			Off	The MPPT module is providing power abnormally.
BOT	Battery Discharging	Green	Steadyon	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.
SYS	Battery charging status indicator	Green	Steadyon	The battery is charging and battery capacity is >95%.
			Blinking	The battery is charging and battery capacity is ≤95%.
			Off	The battery is full capacity or not charge.

DIP Switch	Status
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	/ : 12V lead acid battery
Down	Up	/ : 24V lead acid battery
Up	Down	12.8V lithium battery
Up	Up	Down: 25.6V lithium battery
Down	Up	Up: 14.4V lithium battery
Up	Up	25.6V lithium battery

WI-PS306DF-UPS-15A (Hardware version V2)

- Rear Panel

Power Input	Description
S+, S-	Solar power input.
SD+, SD-	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.

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.
MOT	Power output indicator	Green	Steady on	The MPPT module is providing power properly.
			Off	The MPPT module is providing power abnormally.

*Note: DIP switch function of WI-PS306DF-UPS-15A V2 is same as WI-PS306GF-UPS V4.

LED Indicator	LED Name	Color	Status	Description
BOT	Battery Discharging	Green	Steadyon	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.
SYS	Battery charging status indicator	Green	Steadyon	The battery is charging and battery capacity is >95%.
			Blinking	The battery is charging and battery capacity is ≤95%.
			Off	The battery is full capacity or not charge.
SYS	Power Input indicator	Green	Steadyon	The solar power input is normal.
			1/2s Blinking	The solar power input is in dataset charging, the time is 10 min dec.
			Off	The solar power input is abnormal.
BS	Battery status indicator	Green	Steadyon	There is no solar power input.
			Blinking	The battery capacity is >95%.
			1/2s Blinking	The battery capacity is >15% and <95%.
			Off	The battery capacity is <15%.

LED Indicator	LED Name	Color	Status	Description
BOT	Battery Discharging	Green	Steadyon	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.
SYS	Battery charging status indicator	Green	Steadyon	The battery is charging and battery capacity is >95%.
			Blinking	The battery is charging and battery capacity is ≤95%.
			Off	The battery is full capacity or not charge.
SYS	Power Input indicator	Green	Steadyon	The solar power input is normal.
			1/2s Blinking	The solar power input is in dataset charging, the time is 10 min dec.
			Off	The solar power input is abnormal.
BS	Battery status indicator	Green	Steadyon	There is no solar power input.
			Blinking	The battery capacity is >95%.
			1/2s Blinking	The battery capacity is >15% and <95%.
			Off	The battery capacity is <15%.

3.Hardware Installation

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

Model	Type(12V)	Capacity	Battery Voltage & Amps	Battery Max.Charge Current
WI-PS306DF-UPS	LiFePO4	12V or 24V	5A	
WI-PS306DF-UPS-15A	Lithium		15A	

1x battery for 24V battery

12V 100Ah x 12V 100Ah=24V 100Ah

2x battery for 12V battery

12V 100Ah + 12V 100Ah=12V 200Ah

Step 2: How to select a suitable solar panel?

WI-PS306DF-UPS		
12V Solar Panel:	Maximum Power voltage(Vmp):	>28V
	Open-circuit voltage(Voc):	<35V
24V Solar Panel:	Maximum Power voltage(Vmp):	>45V
	Open-circuit voltage(Voc):	<55V

WI-PS306DF-UPS-15A		
12V Solar Panel:	Maximum Power voltage(Vmp):	>32V
	Open-circuit voltage(Voc):	<45V
24V Solar Panel:	Maximum Power voltage(Vmp):	>45V
	Open-circuit voltage(Voc):	<55V

Model	12V Solar Panel	24V Solar Panel
Model: 12W Solar Panel	18V	36V
Model: 20W Solar Panel	18V	36V
Model: 30W Solar Panel	18V	36V
Model: 50W Solar Panel	18V	36V
Model: 100W Solar Panel	18V	36V
Model: 150W Solar Panel	18V	36V
Model: 200W Solar Panel	18V	36V
Model: 300W Solar Panel	18V	36V

Power Priority: Solar Panel、DC IN、Battery

Step 3: Connect the 24V passive or 802.3at/bt PoE Powered Devices.

Step 4: Power off the WI-PS306DF-UPS device, connect the solar panel, battery and temperature sensor(Not Included).

Step 5: Calculate battery capacity and solar panel power

Take recommended tools for reference

1.Battery capacity: 12V 100Ah or 24V 100Ah

Photovoltaic performance in PVGIS provided by the European Commission

Example: There is 17.5W load in the solar system

If the system should continue working 2 days in the cloudy & raining days,

Then the battery capacity should be sufficient to provide 80% capacity after 2 days).

The battery capacity is about:

17.5W * 2 days * 1.3(system loss coefficient) / 80% (remain 20% capacity) =≈260 Wh

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

17.5W * 24hours * 2.5days = 1260 Wh / 3 (3 days) * 2 (Easter panel efficient to 50%) =≈ 200W

Note: the Charging days need to be planned according to local weather.

There is much different at system loss coefficient due to battery type, temperatures, quality, cycles and so on, and there is much different at solar panel efficiency due to temperatures, dust, shadow, quality, aging and so on, and azimuth, system loss, insertions, quality, aging of aging and so on.

Get some reference, you can visit recommend tools.

Warranty Card

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

- If the product defects within three months after purchase, we will provide you a new product for free exchange.
- If the product defects within the three-year warranty period, we will provide the professional maintenance service.
- Any other defects that are not caused by product we not 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 disaster, water damage, extreme thermal or environmental conditi ions, abuse damaged, we'll only cost-saving will disqualify the product from limited warranty.

Global Website

Cloud Software

Cloud Instruction

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