Installation Guide
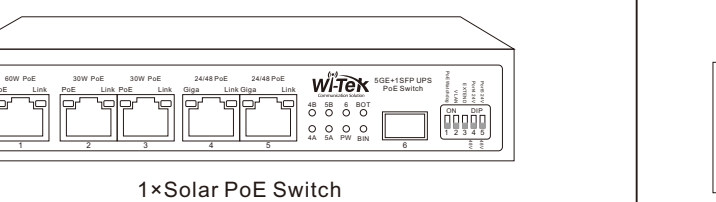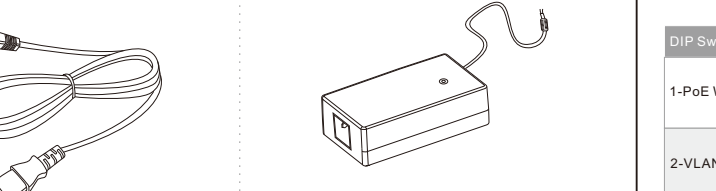
Unmanaged Solar PoE Switch

WI-PS306GF-UPS/WI-PS306GF-UPS-15A
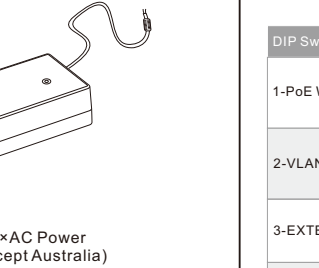
1×Solar PoE Switch

1×AC Power Cord
(Except Australia)

1×AC Power Adapter
(Except Australia)

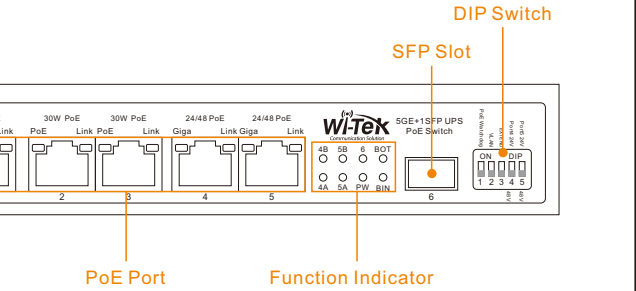Mounting Accessories
(Hook*2, Screw Driver*1, Screw*4)

1×Installation Guide

www.wireless-tek.com
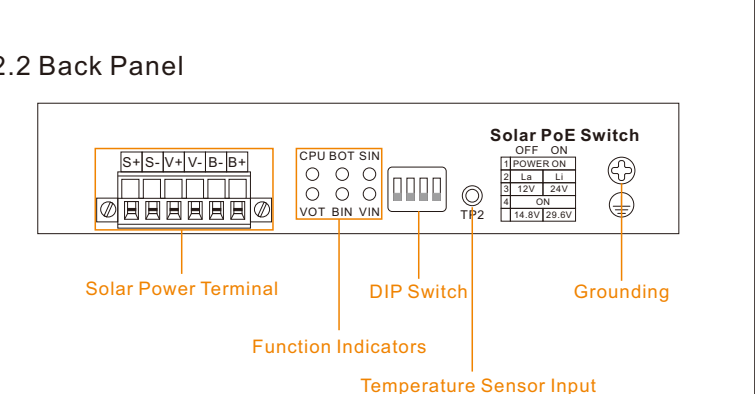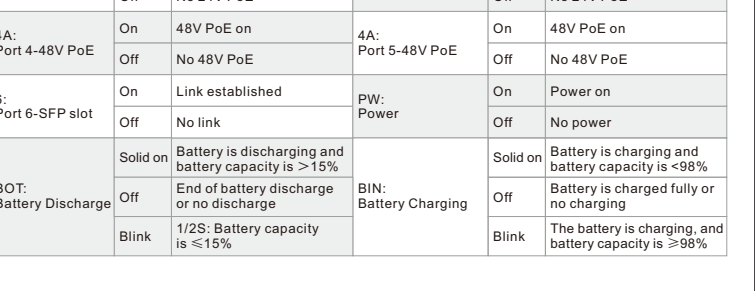
2.1 Front Panel

• 2.1 Front Panel

DIP Switch

SFP Slot

PoE Port   Function Indicator

DIP Switch	Status	Description
1-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
2-VLAN	Up	All downlink ports are isolated from each other, but can communicate with uplink ports.
	Down	Turn off VLAN function
3-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.
4-Port 4	Up	Port 4 can be compatible with 24V forced PoE powered devices
	Down	Port 4 can auto-detect 24V passive or 802.3af/at PoE powered device
5-Port 5	Up	Port 5 can be compatible with 24V forced PoE powered devices
	Down	Port 5 can auto-detect 24V passive or 802.3af/at PoE powered device

Port LED Indicators	Status	Description
PoE	Amber	On	Power on
		Off	No power
Link	Green	On	Power on
		Off	No power
Giga/Gigabit	Amber	1000Mbps link established
	Green	100Mbps link established
	Off	No link

Function Indicator (Front Panel)	Status	Description	Function Indicator	Status	Description
4B: Port 4 24V PoE	On	24V PoE on	4B: Port 5 24V PoE	On	24V PoE on
	Off	No 24V PoE		Off	No 24V PoE
4A: Port 4-48V PoE	On	48V PoE on	4A: Port 5-48V PoE	On	48V PoE on
	Off	No 48V PoE		Off	No 48V PoE
E: Port 5-SFP slot	On	Link established	PW: Power	On	Power on
	Off	No link		Off	No power
BOT: Battery Discharge	Solid on	Battery is discharging and battery capacity is >15%	SOC: Battery	Solid on	Battery is charging and battery capacity is >98%
	Off	End of battery discharge or no discharge		Off	Battery is charged fully or no charging
	Blink	1/2S: Battery capacity is <15%		Blink	The battery is charging, and battery capacity is >98%

• 2.2 Back Panel

Function Indicator (Back Panel)	Status	Description	Function Indicators	Status	Description
CPU: System operation	On	System crashed	BOT: Battery Discharge	Solid on	Battery is discharging and battery capacity is >15%
	On	System didn't start normally		Off	End of battery discharge or no discharge
	Blink	1/2S: Battery is normal 1/4S: Battery is failure		Blink	1/2S: Battery capacity is <15%
SIN: Solar energy input	On	Solar energy input	SOC: Battery Charging	Solid on	Battery is charging and battery capacity is <98%
	Off	No solar energy input		Off	Battery is charged fully or no charging
	Blink	1/2S: Solar energy is in delayed charging, the time is 5 minute 1/4S: Solar power voltage is wrong, stop charging		Blink	The battery is charging, and battery capacity is >98%
VIN: DC input	On	DC input	VOT: PoE Voltage	On	PoE Voltage is normal
	Off	No DC input		Off	No PoE Voltage
	Blink	DC input voltage is error, stop charging			

BOT and SIN indicators are off at the same time and the PoE powered devices are working normally;
Battery has been Charged fully.

Solar Power Terminal
S+ : Solar positive electrode V+ : DC positive electrode B+ : Battery positive electrode
S- : Solar negative electrode V- : DC negative electrode B- : Battery negative electrode

DIP Switch
1: Switch power system
2: Battery type option
3: Battery voltage option
4: Lithium battery voltage option

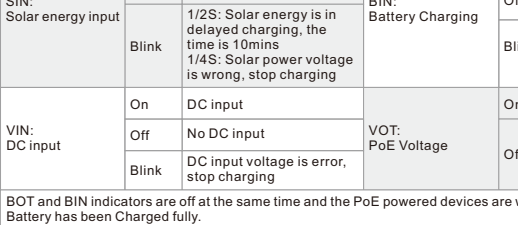Solar Power Terminal   DIP Switch   Grounding

Function Indicators

Temperature Sensor Input

Battery Type Option

Switch 2	Switch 3	Switch 4	Battery Type
Off	Off	-	12V lead acid battery
On	Off	Off	24V lead acid battery
On	On	Off	12V lithium battery
On	On	Off	24V lithium battery
On	On	On	14.8V lithium battery
On	On	On	29.6V lithium battery

Power on device after completing all setting.

3.Hardware Installation

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

Product	Battery type	Battery Voltage	Battery Max Charge Current
WI-PS306GF-UPS	Lead-acid Lithium	12V or 24V	5A
WI-PS306GF-UPS-15A			15A

In series for 24V battery	In parallel for 12V battery
12V 100Ah + 12V 100Ah=24V 100Ah	12V 100Ah + 12V 100Ah=12V 200Ah

Step 2 How to select a suitable solar panel?

Model		Description
WI-PS306GF-UPS	12V Solar Panel	Maximum power voltage(Vmp)	26V
		Open circuit voltage(Voc)	>32V
	24V Solar Panel	Maximum power voltage(Vmp)	36V
		Open circuit voltage(Voc)	>45V
		S= 5- Input Voltage For 12V Battery: DC 15-26V For 24V Battery: DC 30-36V	
WI-PS306GF-UPS-15A	12V Solar Panel	Maximum power voltage(Vmp)	26V
		Open circuit voltage(Voc)	>30V
	24V Solar Panel	Maximum power voltage(Vmp)	36V
		Open circuit voltage(Voc)	>40V
		S= S- Input Voltage For 12V Battery: DC 15-32V For 24V Battery: DC 30-57V	

Step 3 Calculate solar panel and battery capacity

Example: Load=15W (1 pc UPS PoE switch, 2 pcs IP camera, 1 pc wireless CPE)
Sun: 8h/day. Solar Panel: 100W. Battery: 12V/40Ah = 480Wh (100%)

DAY TIME:
Battery capacity at sunrise: 0%
Charge: 100W x 8h x 70% efficiency = 560Wh
Consumption: 15W x 8h = 120Wh
Battery capacity at sunset: 560-120 = 440Wh = 93%

NIGHT TIME
Battery capacity at sunset: 440Wh (93%)
Consumption: 15W x 16h = 240Wh
Battery capacity at sunrise: 440-240Wh = 42% = OK
So you can use 12V/100W solar panel with 12V/40Ah battery.
Note: UPS max. solar power
WI-PS306GF-UPS = 5A x 24V = 120W
WI-PS306GF-UPS-15A = 15A x 24V = 360W

Step 4 Power off the WI-PS306GF-UPS device, connect the solar panel, battery and temperature sensor(not included).

Note: The switch must be grounded.
Note: For model WI-PS306G F-U PS-15A, S+S- and V+V- can't be connected at the same time to avoid the burning device.

Solar PoE Switch
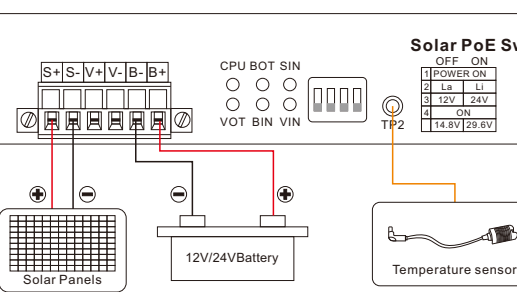
Power Priority: Solar Panel、DC IN、Battery

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

Ground wire screw

Temperature sensor

LED Indicator

Core Flow Switch
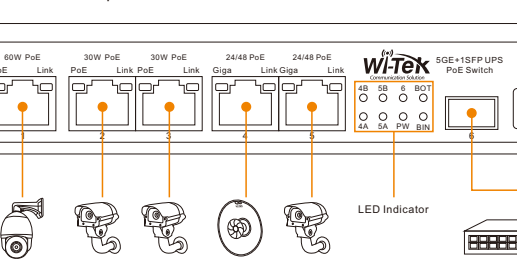
Port	Max Power	PoE standard	Application	P/N
Port 1	60W	802.3af/at/bt	High speed dome camera	1,2,4,5 + 3,6,7,8 -
Port 2-3	30W	802.3af/at	Bullet camera	1,2 + 3,6 -
Port 4-5	30W	Passive 24V /802.3af/at	24V and 48V optional	1,2 + 3,6- or 4,5 + 7,8 -

Warranty Card

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

Technical Support   Cloud Management   Company Website