



## PV-FX-1Y PV smart optimization shutdown



#### **Basic Information**

intelligent optimization shut-off	
Power	600W
Model	PV-FX-1Y
warranty period	10years
lifetime	25 years
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## PV-FX-M PV smart gateway



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intelligent gateway	
Communication protocol	Zigbee
Model	PV-FX-M
warranty period	3years
lifetime	10 years

Certificate







## **Product specification**

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Product Mo	del	PV-FX-1Y	Produc
	Maximum efficiency	≥99.5%	
Efficiency	Euro-area efficiency	≥99.0%	commu
Efficiency	North American efficiency	≥99.1%	
	Efficiency in China	≥99.1%	Commu
	Maximum input power	600W	the quick
	maximum input voltage	70 V	
DC Input	Maximum input current	15 A	Commi
·	MPPT voltage range	10~70 V	the clo
	Starting voltage	15 V	
	Output power	0~800W	Extend
DC Output	Output voltage	0~70 V	interfac
DO Odipui	Maximum output current	18 A	
-	Bypass cut-off function	Yes	Interact
	Automatic shutdown function	Yes	
	Manual shutdown function	Yes	
	Dc overvoltage protection	Yes	
Function	Dc overload protection	Yes	0
	Polarity reverse protection	Yes	Genera Parame
	Short-circuit protection	Yes	
	Wireless data acquisition	Yes	
Detection	Voltage	0.01 V	-
Precision	Circuit	0.01 A	Certifica
	Size	95mm*129mm*56mm	PV-F
	Weight	≤1000 g	
	Level of protection	IP68	
	System voltage	1100 V	
	Data reporting cycle	1 minute	
	Wireless distance	≤100m indoor ≤30m outdoor	
General	Dc input/output terminals	MC4	
Parameter	Input DC line length	≥0.12m	
	Output DC line length	≥1.3m	
	Operating temperature	-45°C~85°C	
	Storage temperature	-40°C~70°C	
	Operating humidity	0%~100%	
	Working altitude	2000 m	
	Power supply mode	DC power supply	
	Turn-off time	10s	
	Way to install	Fixed bracket/fixed PV p	anel frame

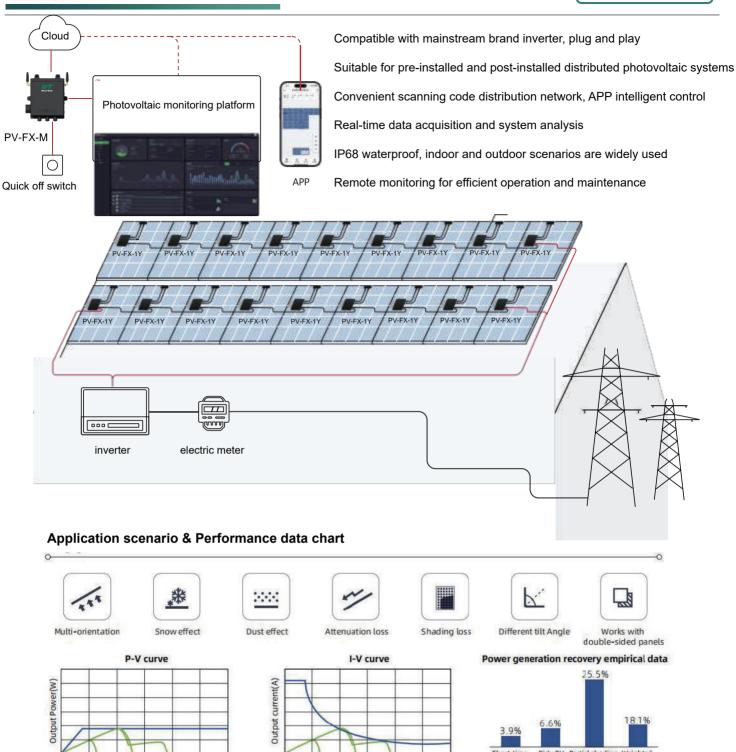
#### **Product specification**

Product Model		PV-FX-M
	Communication protocol	Zigbee
communication	Wireless distance	100m outdoor 30m indoor
	Maximum number of connected 30	
Communicate with the quick break button	Control mode	Ю
	Wired Internet access	RJ 45×1 100Mbps
Communicate with	Wireless Internet access	Wifi 802.11b/g/n 2.4G
the cloud	Number of antennas	2
	Sample interval	1 minute
Extended commur interface	ication <sub>RS485</sub>	COM×1, 9600bps, ModBus-RTU
	Reset button	Self-reset button*1
Interaction	pilot lamp	LED pilot lamp*2
	APP	Monitoring APP
	Operating temperature	-20°C~55°C
	Size	181mm*163mm*51mm (L*W*H)
General Parameter	Weight	≤200g
	Way to install	Wall mounting
	Level of protection	IP65
	Power supply mode	DC 12V power suppl
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PV-FX-1Y and PV-FX-M work together







## **Usage Scenario**



Output voltage(V)

Household rooftop photovoltaic power station



Output voltage(V)

Photovoltaic carport power station



Industrial and commercial park building rooftop photovoltaic power station





# PV-FX1M PV Optimizer

#### Features&Benefits:

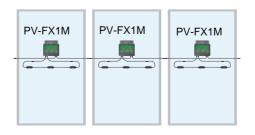
- ♦ 3% ~ 25% optimization, retrieve power generation loss;
- ♦  $\Delta$  < 10 °C Anti-Hotspot, more safe and durable;
- ♦ Applies to all types of modules, Optimization +Voltage Limiting +Anti-Hotspot;
- ♦ Based on power optimization chip, eliminate panel or cell level mismatch;
- Solve the current mismatch issues caused by shading gradients, aging variations, temperature gradients, soiling gradients, etc;
- Optimize power generation, lower LCOE, improve solar system reliability, extend the service life of module;





CHARACTERISTIC PARAMETERS		
Product Model	PV-FX1M	
	Maximum Input Power	800W
	operating voltage range	14~65V
input	MPPT Voltage Range	14~65V
	Maximum input Current	17A
	Over-temperature Protection	160℃
	Peak Conversion Efficiency	99.2%
Conversion Efficiency	Power Consumption @26V	0.8W
	Power Consumption @36V	1.3W
	Power Consumption @46V	1.8W
	Dimensions(L*W*H)	107*105*22mm
	Weight	505g
0 '5 '	Cable	4.0mm <sup>2</sup>
Specifications	Connector	MC4 or compatible MC4
	Operating Temperature Range	-40℃~+85℃
	Protection Degree	IP68
Design Oten dend	Designed Life	25 Years
Design Standard	Quality Commitment	10 Years
Functiom	Standard Features	Optimization  Anti-Hotspot

#### Module Assembly Diagram







# PV-FX2T PV Shutdown Specifications

#### Ratings:

♦ Maximum DC Voltage: 10~80V

♦ Rated DC Current: 16A

♦ Maximum System Voltage: 1500VDC

♦ Protection Degree: IP68

♦ Ambient Temperature : -40°C~ +65°C

### Approvals/Standards:

♦CE

♦NEC 2020 690.12

♦SunSpec

#### Features&Benefits:

- $\Diamond\:$  Low internal resistance MOSFET switch, low temperature rise, no arc pulling and no sputtering;
- PLC communication technology, no peripheral signal cable;
- ♦ MINI type shell design, frame snap-on insertion, easy installation;
- Reverse polarity protection, compatible with short circuit, reverse irrigation design, high reliability;
- ♦ A low-cost, cost-effective, 25-year life design.
- ♦ PV-FX2T and PV-FX-PT1 work together

CHARACTERISTIC PARAMETERS		
Product Model	PV-FX2T	
Mode of communication	PLC	
Maximum input current	20A	
Maximum input voltage	80V	
Maximum power	750W	
Maximum system voltage	1500V (Optional)	
Rated power	600W	
Rated current	16A	
Start-up voltage	12V	
Degree of protection	IP68	
operating temperature	-40℃ ~65℃	
Connector	MC4 or compatible MC4	
Size(L×W×H mm)	106*105*22	
Execution standards	NEC 2017/2020 690.12	



Manually turn off the transmitter power and inverter switch.



Firefighter can work now, no life risk put out fire using water.



Fire put out, house is safe now.





## PV-FX-PS1 PV Shutdown Specifications

## Ratings:

♦ Maximum DC Voltage: 80V♦ Rated DC Current: 16A

♦ Maximum System Voltage: 1500VDC

♦ Protection Degree: IP68

♦ Ambient Temperature : -40°C~ +65°C

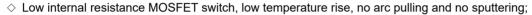
### Approvals/Standards:

♦NEC 2020 690.12

♦TUV

♦CSA

#### Features&Benefits:



- PLC communication technology, no peripheral signal cable;
- ♦ MINI type shell design, frame snap-on insertion, easy installation;
- Reverse polarity protection, compatible with short circuit, reverse irrigation design, high reliability;
- ♦ A low-cost, cost-effective, 25-year life design.
- ♦ PV-FX-PS1 and PV-FX-PT1 work together.

CHARACTERISTIC PARAMETERS	
Product Model	PV-FX-PS1
Mode of communication	PLC
Maximum input current	20A
Maximum input voltage	80V
Maximum power	750W
Maximum system voltage	1500V (Optional)
Rated power	600W
Rated current	16A
Start-up voltage	12V
Degree of protection	IP68
operating temperature	-40℃ ~65℃
Connector	MC4 or compatible MC4
Size(L×W×H mm)	143*35.5*17.5
Weight (g)	405
Execution standards	NEC 2017/2020 690.12



Manually turn off the transmitter power and inverter switch.



Firefighter can work now, no life risk put out fire using water.



Fire put out, house is safe now.

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## PV-FX-PT1 PV shutdown controller

### Product description

This product acts on the switching device at the component level and defaults to the off state. When receiving the transmitted signal of the incoming controller, the component string channel is opened and the inverter operates normally; When the transmit signal is not received, the MOSFET is quickly turned off, and the component string channel is also closed, so that the system high voltage is reduced to less than 30V within 30S to ensure the safety of fire fighting and installation and maintenance personnel.



Transmitter	PV-FX-PT1-4
Photovoltaic shutdown controller	4 road
Operating voltage range	100V-240V 50-60Hz
Waterproof rating	IP67
Dimensions (length, width and height)	169.5mm*146.5mm*35mm
Weight	520g
Operating temperature range	-40°C-+65°C
PLC communication distance	300m
Connector	MC4 or compatible MC4 compatible

PV-FX-PT1-4 Photovoltaic shutdown controller can control 4 sets of string photovoltaic modules.

