

## HS4-A-O PV smart optimization shutdown



### Basic Information

intelligent optimization shut-off

Power 600W/800W

Model HS4-A-O

warranty period 10years

lifetime 25 years

Certificate  

### Product specification

Product Model		HS4-A-O
Efficiency	Maximum efficiency	≥99.5%
	Euro-area efficiency	≥99.0%
	North American efficiency	≥99.1%
	Efficiency in China	≥99.1%
DC Input	Maximum input power	800W
	maximum input voltage	70 V
	Maximum input current	15 A
	MPPT voltage range	10~70 V
	Starting voltage	15 V
DC Output	Output power	0~800W
	Output voltage	0~70 V
Function	Maximum output current	18 A
	Bypass cut-off function	Yes
	Automatic shutdown function	Yes
	Manual shutdown function	Yes
	Dc overvoltage protection	Yes
	Dc overload protection	Yes
	Polarity reverse protection	Yes
	Short-circuit protection	Yes
	Wireless data acquisition	Yes
Detection Precision	Voltage	0.01 V
	Circuit	0.01 A
General Parameter	Size	95mm*129mm*56mm
	Weight	≤1000 g
	Level of protection	IP68
	System voltage	1100 V
	Data reporting cycle	1 minute
	Wireless distance	≤100m indoor ≤30m outdoor
	Dc input/output terminals	MC4
	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 panel frame	

## HS4-A-M PV smart gateway



### Basic Information

intelligent gateway

Communication protocol Zigbee

Model HS4-A-M

warranty period 3years

lifetime 10 years

Certificate

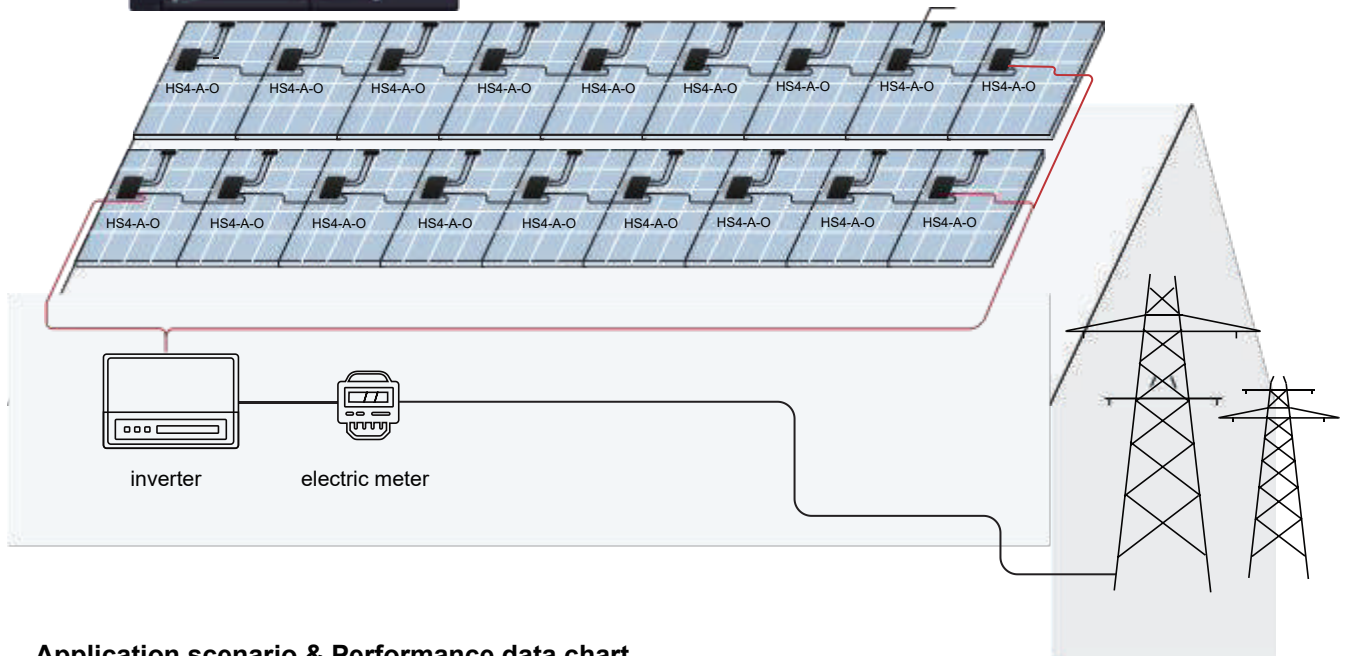
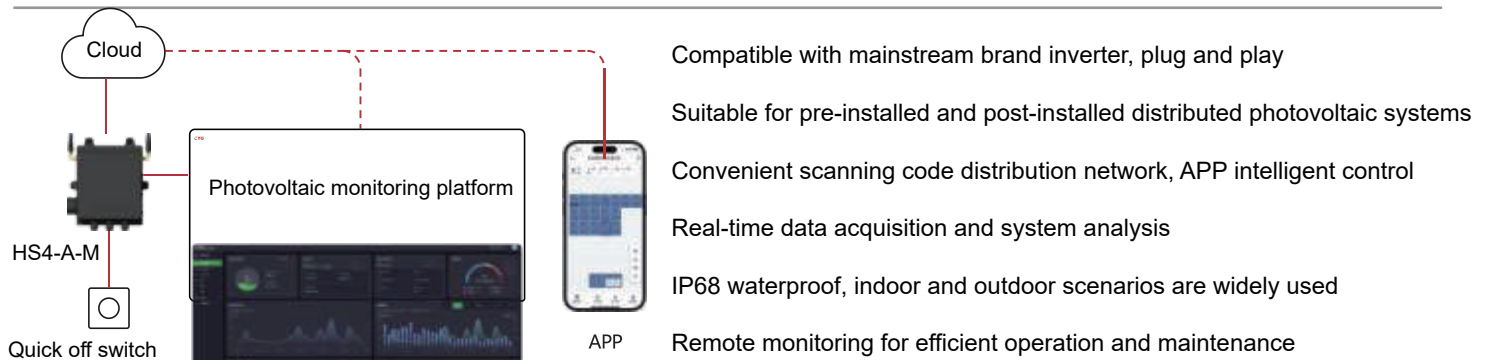


EN 62368, EN 300328, EN301489-1, EN301489-17, EN62311, EN55032, EN55035, EN61000-3-2, EN61000-3-3

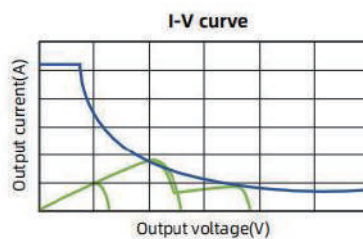
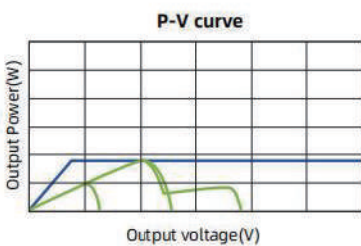
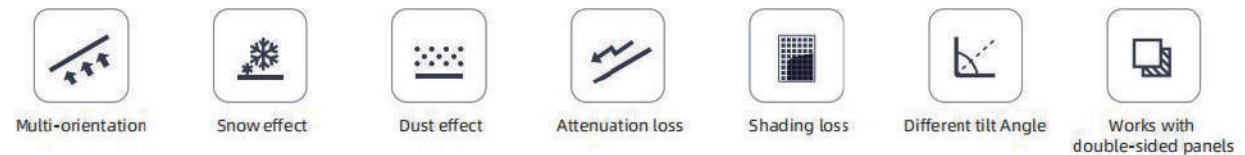
### Product specification

Product Model		HS4-A-M
communication	Communication protocol	Zigbee
	Wireless distance	100m outdoor 30m indoor
	Maximum number of connected	30
Communicate with the quick break button	Control mode	IO
	Wired Internet access	RJ45×1 100Mbps
Communicate with the cloud	Wireless Internet access	Wifi 802.11b/g/n 2.4G
	Number of antennas	2
	Sample interval	1 minute
Extended communication interface	RS485	COM×1, 9600bps, ModBus-RTU
Interaction	Reset button	Self-reset button*1
	pilot lamp	LED pilot lamp*2
	APP	Monitoring APP
General Parameter	Operating temperature	-20°C~55°C
	Size	181mm*163mm*51mm (L*W*H)
	Weight	≤200g
	Way to install	Wall mounting
	Level of protection	IP65
	Power supply mode	DC 12V power supply
Certificate		CE ROHS

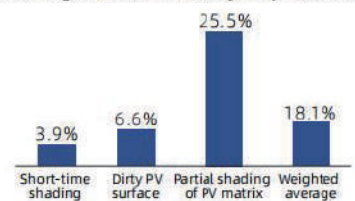
HS4-A-O and HS4-A-M work together  
 Web: <https://solar-eu.solarpilot.com/>  
 APP:google play or apple store /solarpilot



### Application scenario & Performance data chart



### Power generation recovery empirical data



### Usage Scenario



Household rooftop photovoltaic power station



Photovoltaic carport power station



Industrial and commercial park building rooftop photovoltaic power station

## HS4-O-800 PV Optimizer

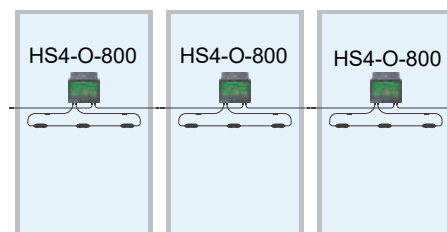
### Features&Benefits:

- ◆ 3% ~ 25% optimization, retrieve power generation loss;
- ◆  $\Delta < 10^{\circ}\text{C}$  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;
- ◆ CE Certification;



CHARACTERISTIC PARAMETERS		
Product Model	HS4-O-800	
input	Maximum Input Power	800W
	operating voltage range	14~65V
	MPPT Voltage Range	14~65V
	Maximum input Current	17A
	Over-temperature Protection	160 $^{\circ}\text{C}$
Conversion Efficiency	Peak Conversion Efficiency	99.2%
	Power Consumption @26V	0.8W
	Power Consumption @36V	1.3W
	Power Consumption @46V	1.8W
Specifications	Dimensions(L*W*H)	107*105*22mm
	Weight	505g
	Cable	4.0mm <sup>2</sup>
	Connector	MC4 or compatible MC4
	Operating Temperature Range	-40 $^{\circ}\text{C}$ ~+85 $^{\circ}\text{C}$
	Protection Degree	IP68
Design Standard	Designed Life	25 Years
	Quality Commitment	10 Years
Funciom	Standard Features	Optimization  Anti-Hotspot

### Module Assembly Diagram



## HS4-A-F 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:

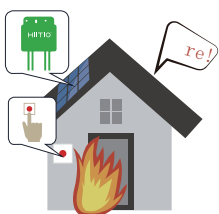
- ◇ CE
- ◇ NEC 2020 690.12
- ◇ SunSpec

### Features&Benefits:

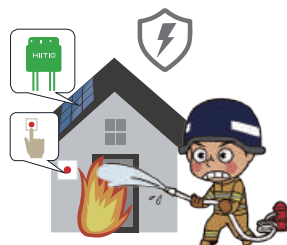
- ◇ Low internal resistance MOSFET switch, low temperature rise, no arc pulling and no sputtering;
- ◇ PLC communication technology, no peripheral signal cable;
- ◇ MINI type shell design, frame snap-on insertion, easy installation;
- ◇ Reverse polarity protection, compatible with short circuit, reverse irrigation design, high reliability;
- ◇ A low-cost, cost-effective, 25-year life design.
- ◇ HS4-A-F and HCPT1 work together



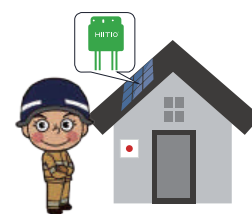
CHARACTERISTIC PARAMETERS	
Product Model	HS4-A-F
Mode of communication	PLC
Maximum input current	20A
Maximum input voltage	80V
Maximum power	750W
Maximum system voltage	1500V (Optional)
Rated power	600W
Rated current	16A
Start-up voltage	12V
Degree of protection	IP68
operating temperature	-40°C ~ 65°C
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.

## HCPS1 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



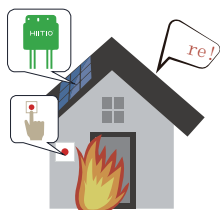
### Approvals/Standards:

- ◇ NEC 2020 690.12
- ◇ TUV
- ◇ CSA

### Features&Benefits:

- ◇ 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.
- ◇ HCPS1 and HCPT1 work together.

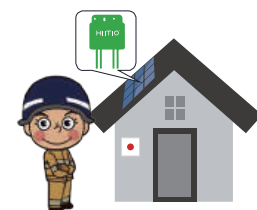
CHARACTERISTIC PARAMETERS	
Product Model	HSPS1
Mode of communication	PLC
Maximum input current	20A
Maximum input voltage	80V
Maximum power	750W
Maximum system voltage	1500V (Optional)
Rated power	600W
Rated current	16A
Start-up voltage	12V
Degree of protection	IP68
operating temperature	-40°C ~ 65°C
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.

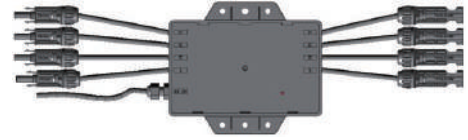


Fire put out, house is safe now.

## HCPT1 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	HCPT1-4
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

HCPT1-4 Photovoltaic shutdown controller can control 4 sets of string photovoltaic modules.

