

HCPO1 PV Optimizer

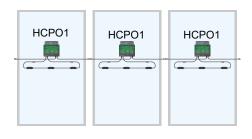
Features&Benefits:

- ♦ 3% ~ 25% optimization, retrieve power generation loss;
- ♦ Δ < 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;
- ◆ TUV/CE Certification;



| CHARACTERISTIC PARAMETERS | | | |
|---------------------------|-----------------------------|----------------------------|--|
| Product Model | HCPO1 | | |
| input | Maximum Input Power | 700W | |
| | Maximum Input Voltage | 80V | |
| | MPPT Voltage Range | 12~80V | |
| | Maximum input Current | 15A | |
| | Over-temperature Protection | 160℃ | |
| Conversion Efficiency | Peak Conversion Efficiency | 99.50% | |
| | Power Consumption @5A | 0.9W | |
| | Power Consumption @8A | 1.4W | |
| | Power Consumption @12A | 2.9W | |
| | Power Consumption @15A | 3.8W | |
| Specifications | Dimensions(L*W*H) | 105*105*22mm | |
| | Weight | 600g | |
| | Cable | 4.0mm ² | |
| | | Input Wire 70cm*2Pcs | |
| | | Output Wire 100cm*2Pcs | |
| | Connector | MC4 or compatible MC4 | |
| | Operating Temperature Range | -40℃~+85℃ | |
| | Protection Degree | IP68 | |
| Design Standard | Designed Life | 25 Years | |
| | Quality Commitment | 10 Years | |
| Functiom | Standard Features | Optimization Anti-Hotspot | |

Module Assembly Diagram





HCPS1 PV Shutdown

Ratings:

♦ Maximum DC Voltage: 80V

♦ Rated DC Current: 16A

♦ Maximum System Voltage: 1500VDC

♦Protection Degree: IP68

♦ Ambient Temperature : -40°C~ +85°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 | HCPS1 | | | |
| Longth of Cable | Input Wire 100 cm * 2Pcs | | | |
| Length of Cable | Output Wire 70 cm* 2Pcs | | | |
| RSS system voltage | 1000V/1500V (Optional) | | | |
| Maximum input voltage | 80V(Io=0) | | | |
| Maximum input current | 20A | | | |
| Maximum input power | 750W | | | |
| Start-up voltage | 12V | | | |
| Rated current | 16A | | | |
| Rated power | 600W | | | |
| Mode of communication | PLC | | | |
| Degree of protection | IP68 | | | |
| Storage and operating temperature | -40°C ~85°C | | | |
| Connector | MC4 or compatible MC4 | | | |
| Execution standards | UL 1741/NEC 2017 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.

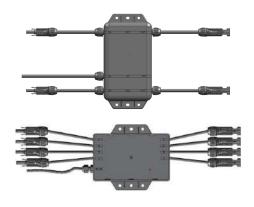




HCPT1 PV shutdown controller

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 | HCPT1-2 | HCPT1-4 | |
|---------------------------------------|----------------------------------|---------|--|
| Working line | 2 road | 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℃-+65℃ | | |
| PLC communication distance | 300m | | |
| Connector | MC4 or compatible MC4 compatible | | |

HCPT1-2 Transmitter can control 2 sets of string photovoltaic modules, HCPT1-4 Transmitter can control 4 sets of string photovoltaic modules.

