

Smart Safety Protector (RSD)

Dual Input 1 For 2



Single Input 1 For 2



Single Input 1 For 1



PLC Transceiver



Smart Logger



Emergency Switch Box



SafeSolar

Product Features



Module-level Arc Protection

Arc Fault Detection: series, parallel arc. Quickly extinguish the arc, effectively preventing the fire accident



Module-level Data Monitoring

Snapshots include voltage, current, power, power generation, temperature, etc.



Automatic Protection/Manual Rapid Shutdown

Automatic protection or manual shutdown, to ensure maintenance and fire safety



1600M PLC Communication

Supports super-long communication distance

Model	FR-PVMS-TFQx	FR-PVMS-THCx	FR-PVMS-TTCx	FR-PVMS-TTQx
Number of Module	1 For 1	1 For 2	1 For 2	1 For 2
Max. Input Operating Voltage	60 V	140 V	70 V × 2	70 V × 2
Max. Input/Output Current	16 A ~ 20 A	20 A ~ 23 A		
Max. Short Circuit Current	23 A	25 A		
Dimension （ Without Cable & Connectors ）	165 × 30 × 21 mm	120 × 68 × 26 mm		
Operating Ambient Temperature Range	-40 °C ~ +85 °C ¹			
Installation Part	PV Rail ²			
Weight	≦ 750 g			
IP Rating	IP68			
Max. System Voltage	1500 Vdc			
Max. Cable Loop Length	1600 m			
Communication Protocol	PLC （Power Line Commnication）			
Cable Specs & Connectors Type ³	4.0 mm ² Cables + MC4 Connectors			
Safety Compliance	NEC 2017, 2020 & 2023 (690.12) ; UL 1741; UL 3741			
Standard Features				
Automatic Protection	√	√	√	√
Manual Rapid Shutdown	√	√	√	√
Advanced Features				
Module-level Arc Fault Shutdown	√	—	—	√
Monitoring Platform				
Module-level Asset Management	√	√	√	√
2D & 3D Module-level Data Display	√	√	√	√
Multi-Module Data Comparison Analysis	√	√	√	√
Real-time Status Protection	√	√	√	√
Physical Plants Overview	√	√	√	√
Energy Management	√	√	√	√
Data Dashboard	√	√	√	√
Smart Fault Analysis	√	√	√	√

*1 When the ambient temperature reaches between 70°C to 85°C, it might operate under the over-temperature protection.

*2 The product is designed exclusively for installation on PV rail and should not be installed on the module frame.

*3 The cable specs & connectors type and the cable length can be customized.

