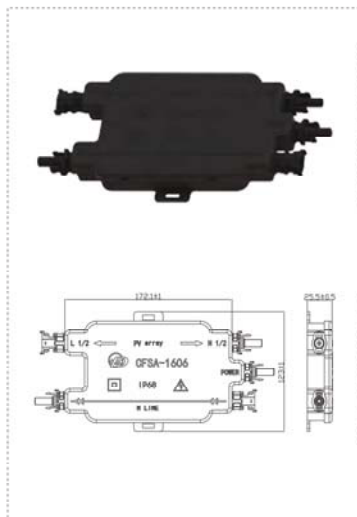


## SMART CONTROL UNIT

### FEATURE HIGHLIGHTS

- Automatic module string DC arc detection
- Automatic module string current leakage detection
- Rapid module DC voltage shut-down
- Automatic recovery after trouble shooting
- Thermal separation between bypass diodes & Main control unit
- Advanced, real-time module string performance measurement
- Cost-effective solutions to meet NEC 2017, 690.12 safety requirement for roof top solar system



CFSA-1606 Main Control Center

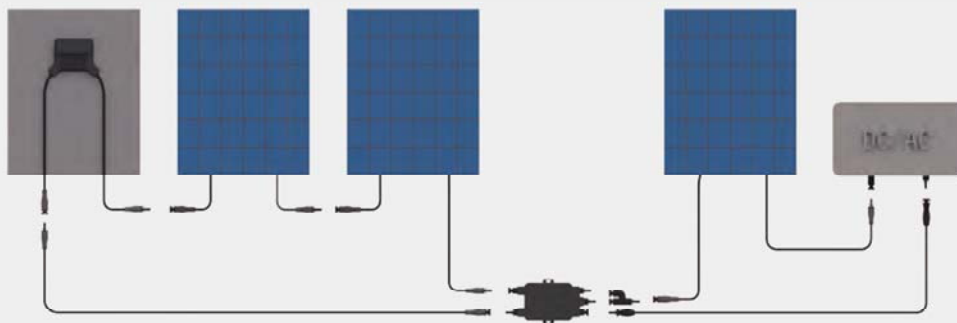


CFSB-1606 Smart J-box



CFSC-1606 Smart Connector

### CFSA-1606 / CFSB -1606



## STANDARDS COMPLIANCE

EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3
Safety	IEC62109-1 (class II safety, TUV-Rheinland), UL1741 (CSA)
PV Junction Box	IEC62790: 2014 (TUV-Rheinland), UL3730 (& CSA)

## TECHNICAL SPECIFICATION

Part No.	CFSA-1606	CFSB-1606	CFSC-1606
Residual Operation Current (I <sub>o</sub> )	30 mA-50 mA	30 mA-50 mA	30 mA-50 mA
Safety Output Voltage after shut down	≤ 40 Vdc	≤ 40 Vdc	≤ 40 Vdc
Fault Reaction Time	≤ 0.5s	≤ 0.5s	≤ 0.5s
Automatic Recovery Time	≤ 10s	≤ 10s	≤ 10s
Power Consuming	2W	0	0
Ambient Temperature Range	-40 C to 90 C	-40 C to 90 C	-40 C to 90 C
Storage Temperature Range	-40 C to 90 C	-40 C to 90 C	-40 C to 90 C
Cooling Method	Potting	Potting	Potting
Dimensions (mm)	See the drawing	See the drawing	See the drawing
Degree of protection	IP68	IP68	IP68
Contact Material	/	Copper, T2 Tin-plated, H62	/
Insulation Material	m-PPE	m-PPE	m-PPE
Flame class	UL94 5VB	UL94 5VB	UL94 5VB
Diode Type	/	FRD 3045	/
Number of Bypass Diodes	/	3	/
Number of Bus Ribbons	/	4	/
Connection of Bus Ribbons	/	Soldering / Welding	/
Diode Junction Temp Max Under Forward Current	/	200 C	/
Current Rating	15 A	15 A	15 A
Max Reverse Current	30 A	30 A	30 A
Rated String Voltage	1000 V / 1500 V	1000 V / 1500 V	1000 V / 1500 V
Max Withstand Voltage	12 kV/16 kV	16 kV	12 kV/16 kV
Cabling Type	/	H1Z2A2-K / PV Wire	/
Cable Length	/	1.0 m / Customized	/
Connector	PV2	PV2 / Customized	PV2
Wire Cross Section	/	1×4.0 mm <sup>2</sup> , 12 AWG	/
Outer Cable Diameter	/	6.4±0.2 mm	/

