

Solar Module Level Rapid Shutdown Safety Solution

BFS Series



- Module Level Rapid Shutdown
- Manual Shutdown by button switch
- Automatic Shutdown on AC Power Loss
- Over temperature Automatic Shutdown
- Compatible with most string inverters and panels
- No cross-talk with inverter or WIFI



Application

BFS-11/BFS-12 is a module level rapid shutdown device offers fire safety for solar rooftop and building, remains the rapid shutdown function period the solar PV system whole working life.

Emergency button switch is required to initiate the rapid shutdown operating, as a trigger placed on the ground and easier to reach.

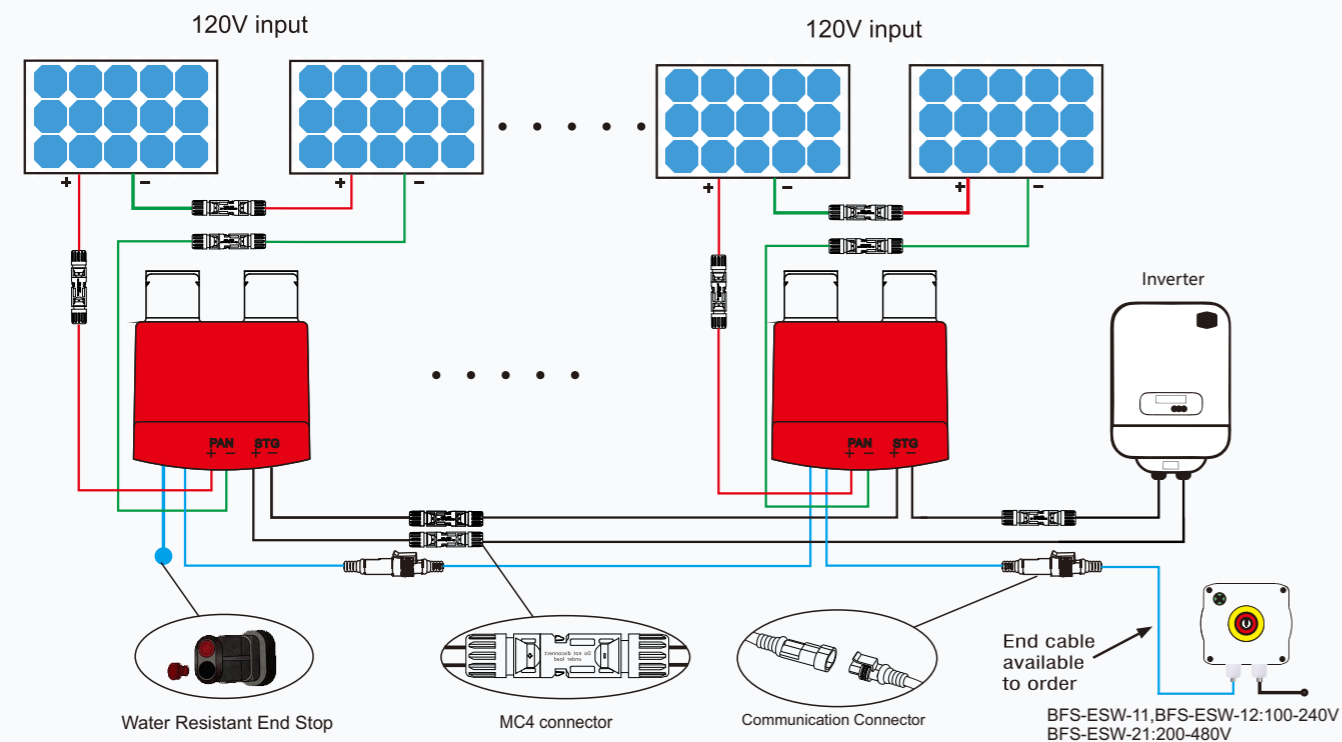
The communication cable on the rapid shutdown device should be connected in series and wire to the button switch. So the button switch can control the BFS rapid shutdown devices.

A communication without cross-talk with the inverter or WIFI source.

BFS-11 RSD Specifications

Model	BFS-11
Maximum Input Voltage	120V
Maximum Input Current	18A
Maximum Power	2160W
PV Input and Output Cables	4.0mm ² (12AWG) Cables + MC4 Connectors
PV Input Cables Length	180mm
PV Output Cables Length	1800mm
IP Protection	IP68
Operating Temperature	-40°C to +55°C
Storage Temperature	-40°C to +85°C
Standard Compliance	EN 62109-1:2010, EN 61058-1:2018
PV Connectors	Staubli MC4 (Standard) Jinko connectors for option

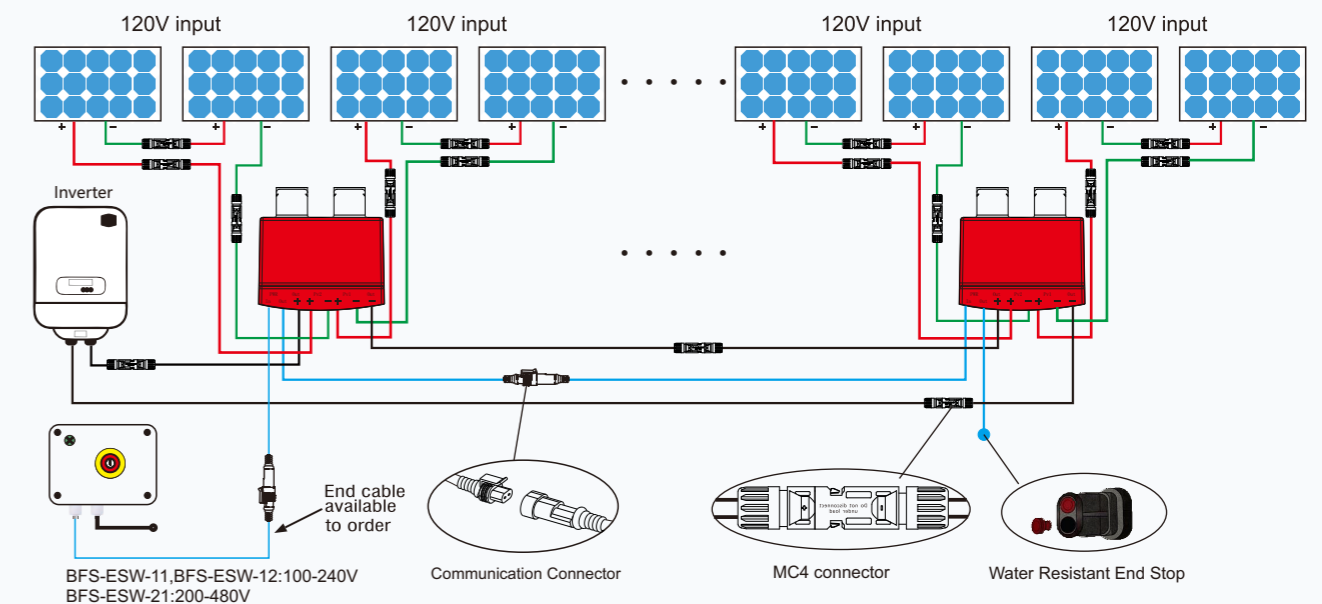
DC Power Supply for each RSD	
Voltage Range	14V ~ 28V
Maximum Current	8mA
Maximum Power	0.15W
Power Supply Cables (Signal Cables)	2x0.823mm ² (18AWG) Signal Cables + Signal Connectors
Power Supply Cables Length	1800mm



BFS-12 RSD Specifications

Model	BFS-12
Maximum Input Voltage	120V*2
Maximum Input Current	18A
Maximum Power(Input1+Input2)	4320W
PV Input and Output Cables	4.0mm ² (12AWG) Cables + MC4 Connectors
PV Input 1 Cables Length	180mm
PV Input 2 Cables Length	300mm
PV Output Cables Length	1800mm
IP Protection	IP68
Operating Temperature	-40°C to +55°C
Storage Temperature	-40°C to +85°C
Standard Compliance	EN 62109-1:2010, EN 61058-1:2018
PV Connectors	Staubli MC4 (Standard) Jinko connectors for option

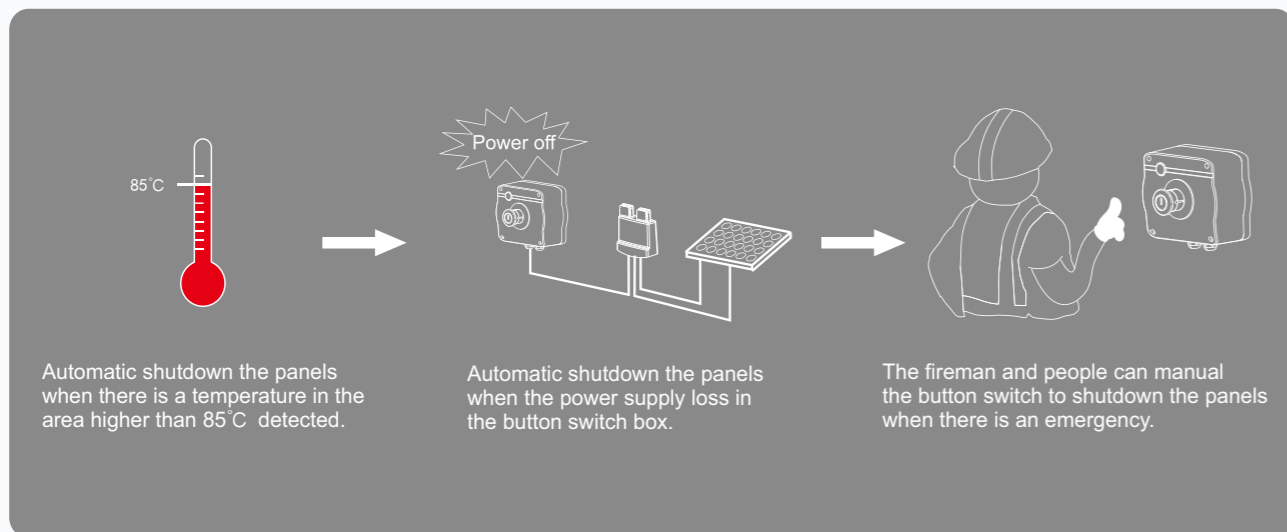
DC Power Supply for each RSD	
Voltage Range	14V ~ 28V
Maximum Current	12mA
Maximum Power	0.2W
Power Supply Cables (Signal Cables)	2x0.823mm ² (18AWG) Signal Cables + Signal Connectors
Power Supply Cables Length	1800mm



Each BFS-11/BFS-12 device can hold solar modules output max: 120V total, the modules connect in series as solar string goes to inverter as PV system designing. The connection of BFS-11/BFS-12 RSD and button switch is via communication cable.

Note: If your market requires NEC2017/NEC2020 requirement, we recommend one RSD BFS-11 connects 1 panel(≥40V) or 2 panels(<40V); BFS-12 connects 2 panels(≥40V) or 4 panels(<40V).

A Complete RSD Solution



Emergency Shutdown Switch



The Emergency Switch offers the manual shutdown of solar panels on the rooftop by pushing the button. AC power from grid or AC side at solar inverter both could be the power source for the emergency switch.

And when the AC power loss, automatically shuts down the DC panels at the meantime. (The green light is ON only indicates the AC power supply is live on).

Emergency Button Switch Specifications

Model	BFS-ESW11(-K)	BFS-ESW12(-K)	BFS-ESW21(-K)
Input Voltage Range	100~240VAC		200V~480VAC
Maximum Working Current	0.5A	0.88A	0.7A
Input Frequency Range	47~63Hz		
Rated Output Voltage	24VDC		
Maximum Output Current	315mA	750mA	1250mA
Maximum Output Power	7.06W	18W	30W
Power Supply Cables	0.823mm ² / 18AWG		
Cables Torque	0.5 NM/4.5lbin		
DIN Terminal Connector Wiring	0.5-4mm ² /26AWG-10(Note:BFS-11/ BFS-12 uses communication connector 2x0.823mm ²)		
DIN Terminal Torque	0.5-0.8Nm/4.5-7lbin		
Ambient Operating Temperature	-30°C to +70°C		-30°C to +85°C
Maximum BFS-11 Units	40 Units	90 Units	90 Units
Maximum BFS-12 Units	20 Units	45 Units	45 Units
Maximum Distance (First RSD to the Emergency Button Switch)	150m		