

PEFS Series



High Craftsmanship and Standards



Over temperature protection $\geq 85^{\circ}\text{C}$



Max 20A support



Flame retardant: UL94-V0



Ingress protection: $> \text{IP68} / \text{NEMA 4X}$



SUNSPEC protocol compliance



long lifespan for 25 years



Slim Design, Extremely Easy Installation

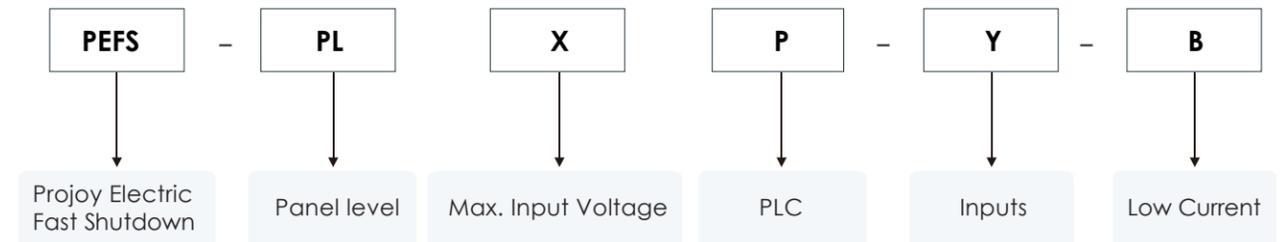


1V/RSD troubleshooting solution available



Dual frequency brands signal transmission

Naming



Technical Data

| Type | PEFS-PL80P-11 | PEFS-PL80P-21 |
|-------------------------------|---|---------------|
| Number of PV Inputs | 1 | 2 |
| Number of Modules Recommend | 1 | 2 |
| Maximum Allowed Input Voltage | 80V | 80V |
| Maximum Allowed Input Current | 15A / 20A | |
| Maximum Output Voltage | 80V | 160V |
| System Voltage | 1000V / 1500V | |
| Control Compliance | Power Line Communication (PLC) | |
| Protections | Input Over / Under Voltage | |
| Ambient Operating Temperature | -30°C to $+60^{\circ}\text{C}$ | |
| Protection Temperature | 85°C | |
| IP Level | $> \text{IP68}$, NEMA 4X | |
| Fire-proof Level | Flame retardant, UL94-V0 | |
| Humidity | 0%~90% | |
| PV Connectors | MC4 (Customized) | |
| Design Life Span | 25 years | |
| Size | 120*43.8*20mm | |
| Weight | $< 150\text{g}$ (Excluding Cables) | |
| Cable Length, PV1+ Input | 120mm | 120mm |
| Cable Length, PV1- Input | 1200mm | 1200mm |
| Cable Length, PV2+ Input | / | 1200mm |
| Cable Length, PV2- Input | / | 120mm |
| Cable Length, Power Output | 650mm+650mm | 1250mm+1250mm |
| Standard Compliance | NEC2017/2020 (690.12); UL1741; UL3741; IEC/EN62109; IEC/EN61000 | |

Tripping Ways

Porjoy RSD Overview

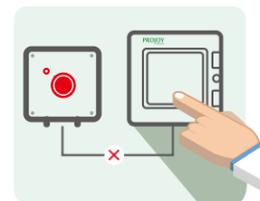
The Projoy RSD is designed to be installed at solar panel level and provides safety shutdown of the DC supply to ZERO VOLTS in case of emergency. Shutdown is initiated in 3 ways - Manual Operation, AC Supply Cut-Off or Temperature Rise Trigger as follows:

Temperature Rise Trigger



Automatic shutdown occurs if the temperature sensor on board of the RSD detects an ambient temperature rise above 85C

AC Supply Cut-Off



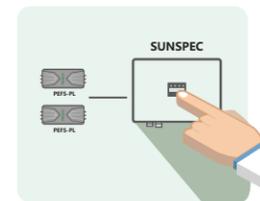
Disconnection of the external AC supply, by whatever means, causes automatic remote operation of the Emergency Rapid Shutdown Switch and solar panel shutdown.

Manual Operation



Manual shutdown is initiated within less than 0.1 second of operation by pressing the emergency pushbutton on the Emergency Rapid Shutdown Switch. The Emergency Switch can be conveniently located at ground level for easy access or multiple switches can be installed in different multi-level building zones.

Command Trigger



Following SUNSPEC, inverter can send command directly to RSDs to shutdown.

Fail-Safe Operation

The RSD is designed for fail-safe operation ensuring that, will not compromise the solar panel isolation and shutdown status, maintaining full zero volt isolation.

North American Solar Market Approvals

The RSD has been extensively tested by ETL to meet the various PV standards required within the North American market.

UL1741 PVRSE Certification

The RSD is fully certified to UL1741 PVRSE (PV Rapid Shutdown Equipment) for applications. As a dedicated RSD operating as a safety switching without communications protocols, which is compatible with any PV inverter unit.

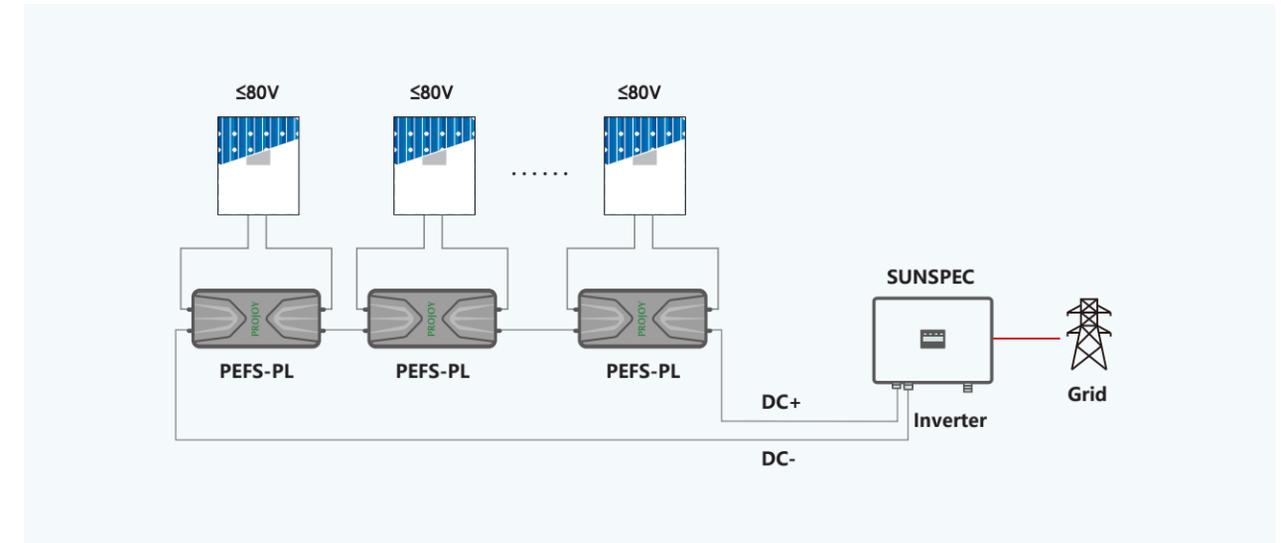
UL3741 PVRSS Certification

The RSD is fully certified to UL3741 PVRSS (PV Rapid Shutdown System) for applications. As a dedicated RSD operating as a safety switching without communications protocols, which is compatible with any PV inverter unit.

PEFS-PL Series

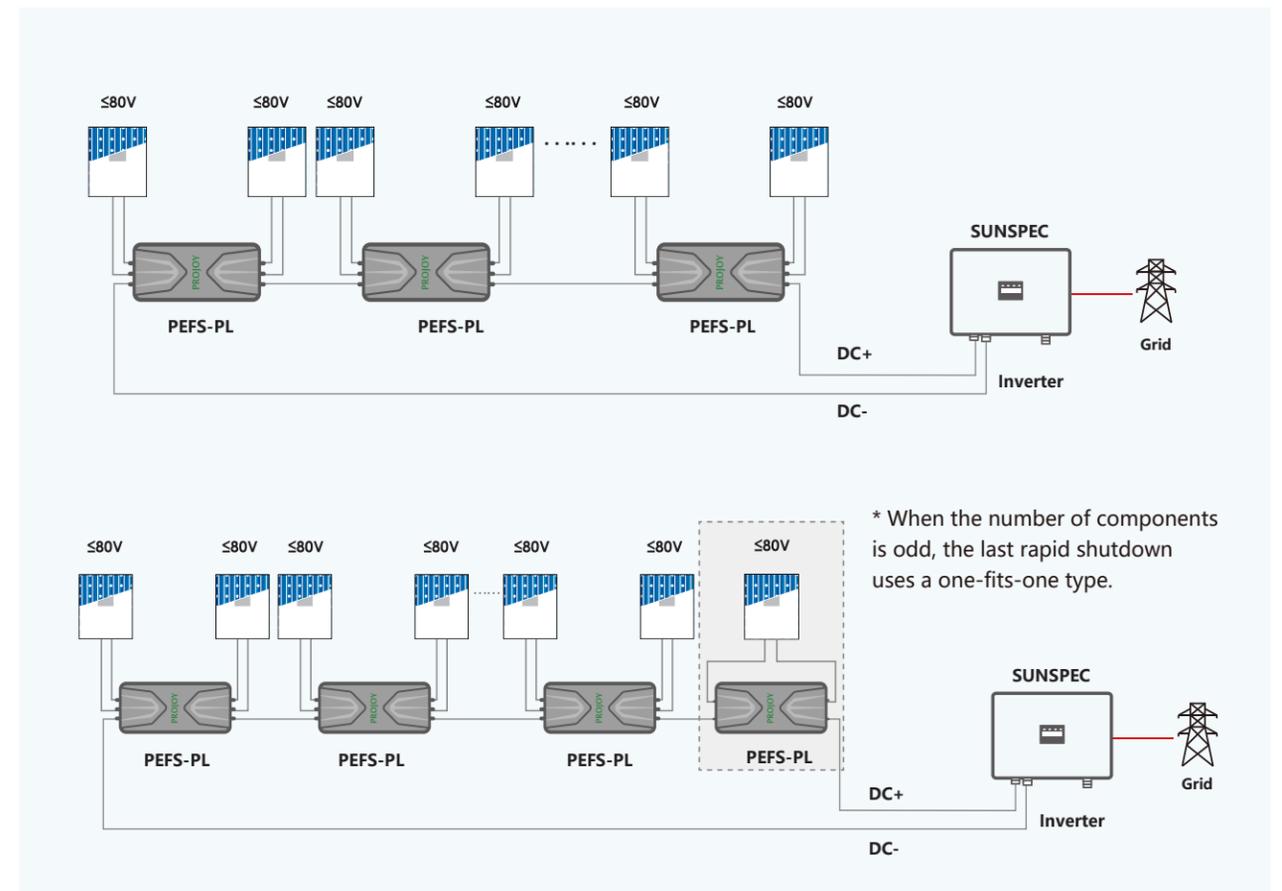
When the open-circuit voltage of PV panel is below 80V.

PEFS-PL80P-11



When the open-circuit voltage of PV panel is below 80V.

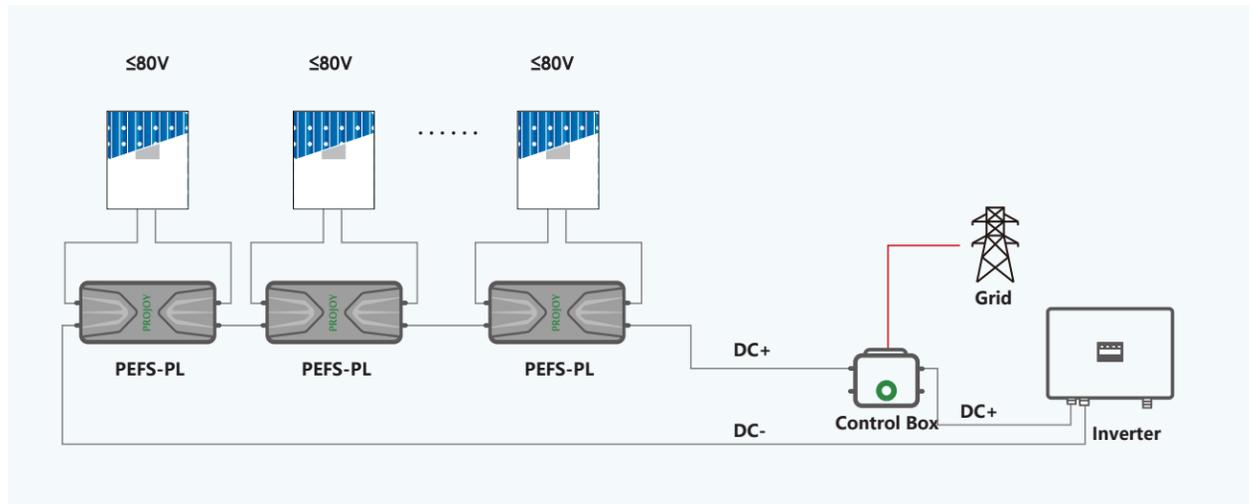
PEFS-PL80P-21



PEFS-PL Series

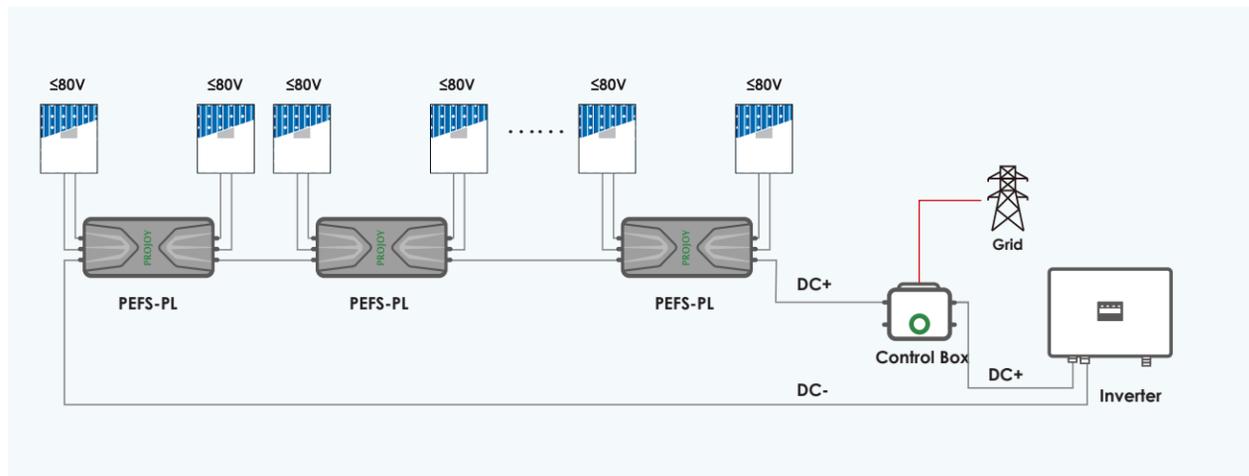
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PEFS-PL80P-11



When the open-circuit voltage of PV panel is below 80V.

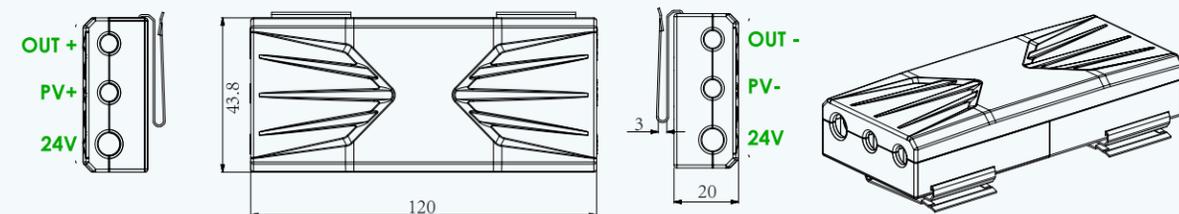
PEFS-PL80P-21



Dimension

PEFS-PL80S-11
PEFS-PL120S-11

(Unit: ± 0.5 mm)



PROJOY
electric
— Switch To Safety! —

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