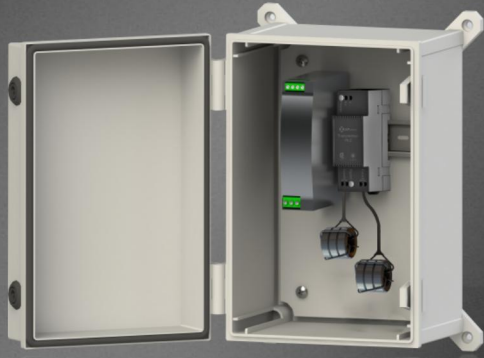# APsmart

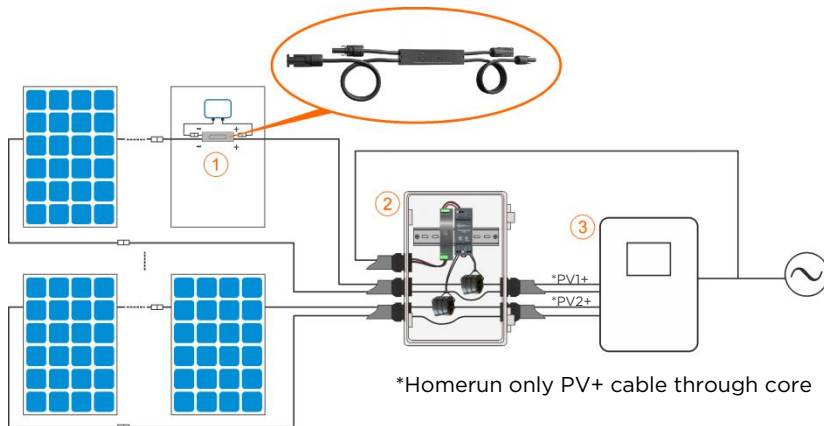## Raising the bar in innovative DC MLPE solar power systems

TRANSMITTER-PLC OUTDOOR KIT

- Meets NEC 2017, 2020&2023 (690.12) requirements
- Switching off Transmitter-PLC results in rapid shutdown of the output of PV modules
- Meets SunSpec requirements
- Equipped with single/dual core
- Optional 85-264VAC power supply
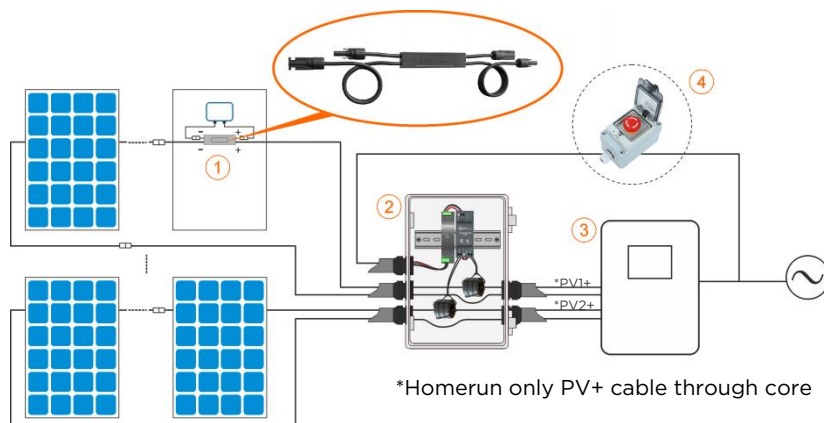- Optional 180-550VAC power supply

The APsmart Rapid Shutdown System Transmitter-PLC is part of a rapid shutdown solution when paired with APsmart RSD, a PV module rapid shutdown unit. While powered on, the Transmitter-PLC sends a signal to the RSD units to keep their PV modules connected and supplying energy.

RSD units automatically enter rapid shutdown mode when the Transmitter-PLC is switched off and resume energy production when power is restored to the Transmitter-PLC. This solution complies with NEC 690.12 specifications for 2017, 2020&2023 and supports the SunSpec signaling for rapid shutdown.
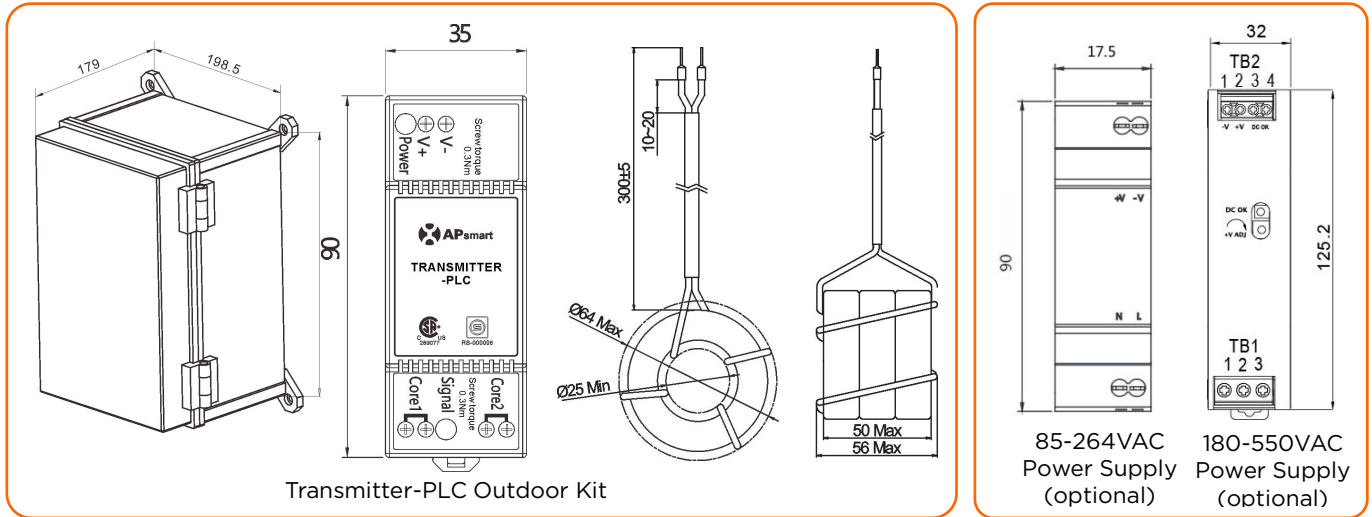
Transmitter-PLC Outdoor Kit includes a Transmitter-PLC with one or two cores, outdoor enclosure, 85-264VAC or 180-550VAC power supply. It could be used in residential or commercial project.

*Homerun only PV+ cable through core

① RSD

② Transmitter-PLC Outdoor Kit

③ Inverter

*Homerun only PV+ cable through core

① RSD

② Transmitter-PLC Outdoor Kit

③ Inverter

④ Emergency stop button box (optional): Press the emergency stop button, the transmitter AC power supply is disconnected, the RSD closes the output, and the system rapid shutdown.

Transmitter-PLC Outdoor Kit

85-264VAC Power Supply (optional)

180-550VAC Power Supply (optional)

Main electrical data

Input Voltage	12 VDC
Input Current	0.8A
Communication	PLC

Power Supply

Residential (optional)	85-264VAC Input, 12VDC Output, 90 mm x 17.5 mm x 58.4 mm
Commercial (optional)	180-550VAC Input, 12VDC Output, 125.2 mm x 32 mm x 102 mm

Core data

Max. Current	320A(160A*2)
Max. System Voltage	1500VDC
Internal Opening for Wires/Outside Dimensions	~25mm/64mm
Max. Supported PV Modules per String	30 modules

Max.Number Of Strings Per Core

DC Cable Diameter	Φ5.9mm	Φ6.35mm	Φ7mm	Φ8.6mm
Number Of Strings Per Core(without connector)	≤15	≤15	≤14	≤10

Environmental

Temperature	-40℃ ~ +60℃

Structure data

Dimensions (W x H x D)	198.5 mm x 298 mm x 179 mm
Enclosure Environmental Rating	IP65

Features & Compliance

Safety Compliance	NEC 2017, 2020&2023 (690.12); UL1741; CSA C22.2 No. 330-17
EMC Compliance	FCC Part15; ICES-003

ORDERING INFORMATION

408014	Single Core Transmitter-PLC-Outdoor Kit, 180-550VAC Power Supply
408015	Dual Core Transmitter-PLC-Outdoor Kit, 180-550VAC Power Supply
408016	Single Core Transmitter-PLC-Outdoor Kit, 85-264VAC Power Supply
408017	Dual Core Transmitter-PLC-Outdoor Kit, 85-264VAC Power Supply
408018	Single Core Transmitter-PLC-Outdoor Kit, 180-550VAC Power Supply, Emergency button
408019	Dual Core Transmitter-PLC-Outdoor Kit, 180-550VAC Power Supply, Emergency button
408020	Single Core Transmitter-PLC-Outdoor Kit, 85-264VAC Power Supply, Emergency button
408021	Dual Core Transmitter-PLC-Outdoor Kit, 85-264VAC Power Supply, Emergency button