Raising the bar in innovative DC MLPE solar power systems
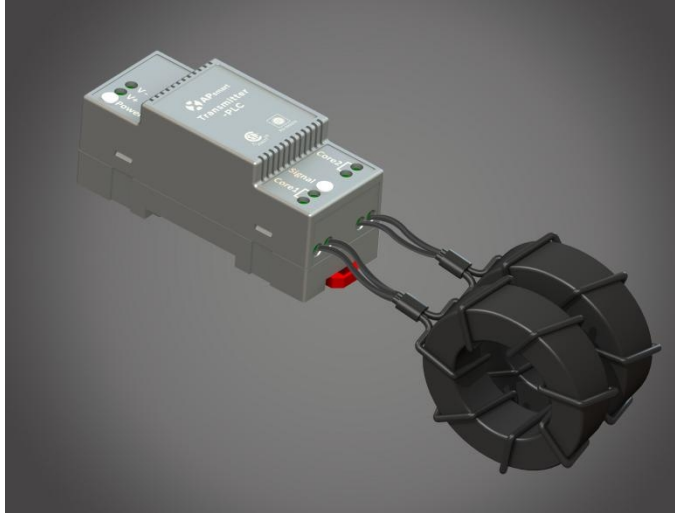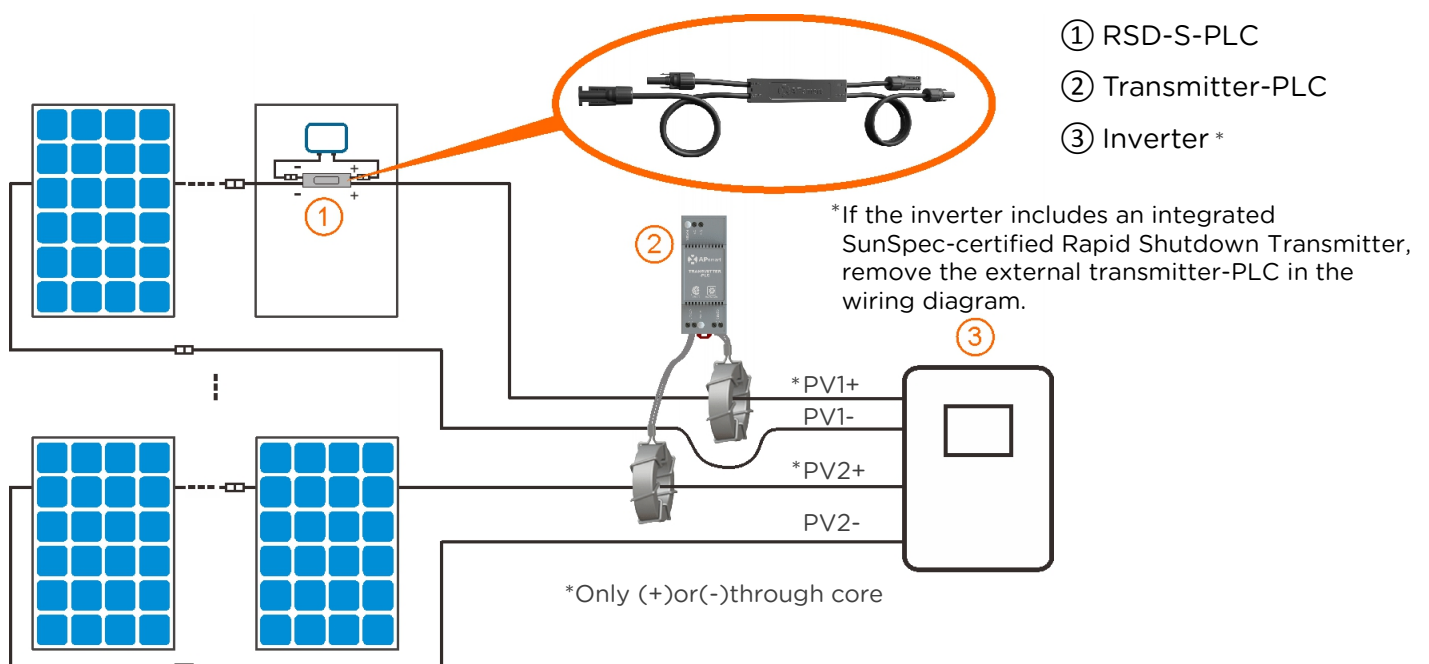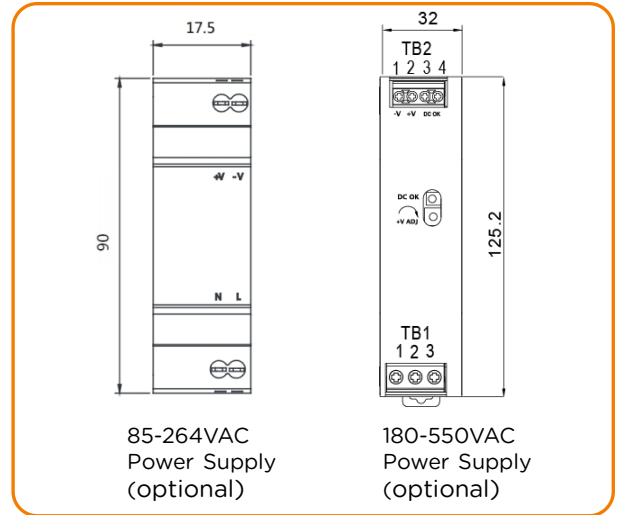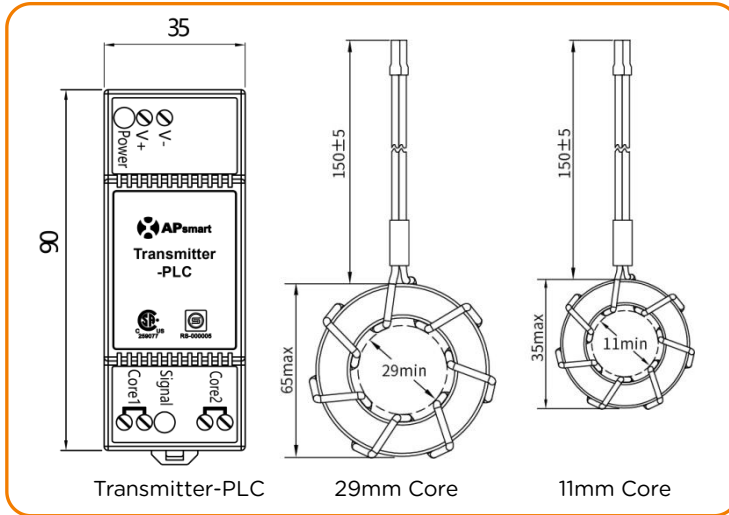
TRANSMITTER-PLC

- Meets NEC 2017&2020 (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-S-PLC, a PV module rapid shutdown unit. While powered on, the Transmitter-PLC sends a signal to the RSD-S-PLC units to keep their PV modules connected and supplying energy.

RSD-S-PLC 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 and supports the SunSpec signaling for rapid shutdown.

The Transmitter-PLC includes one or two cores and an optional power supply: 85-264VAC for residential, 180-550VAC for commercial.

① RSD-S-PLC
② Transmitter-PLC
③ Inverter *

*If the inverter includes an integrated SunSpec-certified Rapid Shutdown Transmitter, remove the external transmitter-PLC in the wiring diagram.

*PV1+
PV1-
*PV2+
PV2-

*Only (+)or(-)through core

Transmitter-PLC | 29mm Core | 11mm Core

85-264VAC Power Supply (optional) | 180-550VAC Power Supply (optional)

Main electrical data	
Input Voltage	12VDC
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	29mm Core	11mm Core
Max. Current	150A Per core	75A Per core
Max. System Voltage	1500VDC	1500VDC
Internal Opening for Wires/Outside Dimensions	~29mm/65mm	~11mm/35mm
Max. Supported PV Modules per String	30 modules	30 modules

Number Of Strings Per Core				
DC Cable Diameter(without connector)	Φ5.9mm	Φ6.35mm	Φ7mm	Φ8.6mm
29mm Core	≤15	≤15	≤14	≤10
11mm Core	≤6	≤5	≤4	≤2

Environmental	
Temperature	-40℃ ~ +100℃

Structure data	
Dimensions (W x H x D)	90 mm x 35 mm x 40 mm
Enclosure Environmental Rating	IP30

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

ORDERING INFORMATION

406000	29mm Dual Core Transmitter-PLC (no power supply)
406001	29mm Single Core Transmitter-PLC (no power supply)
406002	11mm Dual Core Transmitter-PLC (no power supply)
406003	11mm Single Core Transmitter-PLC (no power supply)