

Transmitter-PLC Installation

① Power Supply
② Transmitter-PLC
③ Core 1
④ Core 2

180/550VAC Power Supply
Optional Power Supply 120/240VAC 480/277VAC

LED1(Power) V+
V-
Core 2
LED2(Signal)
Core 1

Note:
Transmitter-PLC terminal installation requirements:
1. A 3mm slotted screwdriver
2. The torque requirement standard: 0.2-0.4N·m

Warning:
The cores need to be fixed to prevent swing and causing the damage to the Transmitter-PLC.

Note: If there is only one core needed, connect using Core 1 terminal.

Power supply must be on same AC branch circuit as inverter to meet rapid shutdown requirements.

During operation, the Power LED should be lit and the Signal LED should be blinking. When Transmitter fails to work, the signal LED will not be blinking. If the Power LED is also not lit, check the power supply first.

Note: Install RSD before powering on the Transmitter.

- Mount Transmitter-PLC and power supply on DIN rail
- Connect DC leads from power supply to transmitter-PLC
- Connect dual core(Core 1 and Core 2) to transmitter-PLC

Place rapid shutdown system label no more than 1m (3ft) from Transmitter or AC disconnect if not at same location.

① RSD
② Transmitter-PLC Outdoor Kit
③ Inverter

Note:
1. Do not place the RSD (including DC connectors) where exposed to the sun, rain or snow, even gap between modules. Allow a minimum of 3/4" (1.5cm.) between the roof and the bottom of the RSD to allow proper air flow.
2. Please use the same type of DC connector as the RSD in the system. The RSD damage caused by using different type of DC connector will not be covered by the warranty.

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Transmitter-PLC Wiring

AC Wires for Power Supply

Grounding PE L2 L1

Note: 180/550VAC power supply isolation class I requires grounding. 85/264VAC power supply isolation class II does not require grounding.

Note: Install RSD before powering on Transmitter.

- Pass either positive or negative cables through cores (either both positive cables or both negative cables. Do not use one positive and one negative cable.)
- Connect wires to AC side of Power supply

Max.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

Max String Length: **30 modules**
Max Current Per Core: **150A**
Max Cable Length From Inverter (+) to Inverter (-): **1000ft (300m)**

Note:
The waterproof jacket and related accessories are not configured before delivery and customers need to buy by themselves.

Homerun Only (+) or (-) through Core

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System Wiring Diagram

Note:
1. Do not place the RSD (including DC connectors) where exposed to the sun, rain or snow, even gap between modules. Allow a minimum of 3/4" (1.5cm.) between the roof and the bottom of the RSD to allow proper air flow.
2. Please use the same type of DC connector as the RSD in the system. The RSD damage caused by using different type of DC connector will not be covered by the warranty.

Troubleshooting

Check that the system conforms to the design rules:

- Up to 30 modules per string
- String length up to 1000ft (total cable length from + to -)
- DC cables through Core must be the same polarity(all positive or all negative)
- Power LED should be lit and Signal LED should be blinking during operation
- Verify that Core wiring is correct
- Power cycle Transmitter-PLC if Signal LED is unlit

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Outdoor Kit Drilling Guide

Drilling Guide for .75" Conduit

Single Core

2x∅28

Dual Core

3x∅28

Drilling Guide for 1" Conduit

Single Core

2x∅35

Dual Core

3x∅35

Note: The Outdoor Kit was not punched before delivery and customer need to make it themselves according to the actual situation. The figure is only for reference.

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Product information is subject to change without notice.

Transmitter-PLC Outdoor Kit Quick Installation Guide

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This installation guide is for customers who have purchased Transmitter-PLC-Outdoor Kit. If you have not purchased our outdoor kit, the following content is used as a reference.