



TX 12K-A

PLC RSS Transmitter

- Provides the “heartbeat signal” for RSD
- 2017 NEC 690.12 and 2020 NEC 690.12 Rapid Shutdown Certified.
- SunSpec Rapid Shutdown Certified
- No need to add cores for PLC communication

PLC RSS Transmitter Datasheet

RSD PLC Transmitter with PV Module-Level Monitoring

Sol-Ark TX 12K-A transmitters are part of the Rapid Shutdown Line, they are located inside Sol-Ark 12K-2P-N inverters.

Provides the permission-to-operate powerline communication (PLC) signal when paired with Sol-Ark O900-80V or any other SunSpec RSD Certified module-level power electronic devices to provide rapid shutdown system compliance as per 2017 & 2020 NEC 690.12 specifications.

The TX 12K-A Transmitters can be installed in existing Sol-Ark 12K previously commissioned.

No need to install cores for Power Line Communication (PLC), TX 12K-A has the transmitter built into the MPPT board of the Sol-Ark 12K.

Quick Specs

Model	TX 12K-A
Power Supply	On board – 48VDC (Includes power cable)
Dimensions (W x L)	110 mm x 214 mm
Max Number of Strings	4
Number of MPPTs	2
Max Power Consumption	8W

Made for: [Sol-Ark 12K-2P-N](#)



TX 12K-A Technical Data

MODEL TX 12K-A

INPUT DATA (DC)

On-board Power Supply Input Voltage	48VDC**
On-board Power Supply Input Current	0.5A
Maximum PV System Voltage	500VDC
Number of PV String Inputs	4
Maximum RSD Devices in series per string	30 (subject to NEC 690.12)

MECHANICAL DATA

Dimensions	110 mm x 214 mm
Weight	316g
PV String Connection	WAGO Terminal block 221-613 10WG

ENVIRONMENTAL

Operating Ambient Temperature Range	-13°F to + 131°F (-25°C to + 55°C)
Altitude	4000m
Cooling Method	Natural Convection (within Sol-Ark inverter wire box)
Installation Method	Field replaceable

FEATURES

Communication Signal	Power Line Communication (PLC)
Warranty	10 years

STANDARDS COMPLIANCE

Photovoltaic Rapid Shutdown System	NEC 2017 (690.12), NEC 2020 (690.12)
Safety Compliance	UL 1741, CSA 22.2 No. 107.1
EMC Compliance	FCC Part 15 Class B; IEC 61000-6-2; IEC 61000-6-3
Others	SunSpec RSD Certified

** It is required to have a **battery based system** to use the On-board Power Supply.



Easy integration of TX 12K-A with the inverter

Transmitter TX 12K-A can be powered from:

- On-board Power Supply (**Battery required**, see TX 12K-A Quick Installation Guide for more details).
- External 48VDC power supply (for grid-tied)

TX 12K-A installed inside a Sol-Ark 12K-2P-N
Installation using on-board power supply from battery bank

Ordering Information

For sales info:

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Contact us:

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It pairs with:

- Sol-Ark **O900-80V**

