

TR4-X Transceiver

Rugged, Outdoor Wireless Transceiver for Smart Metering



The **TR4-X Transceiver** is a weatherproof, long-range wireless meter-reading solution, designed for harsh environments such as meter pits and outdoor utility setups.

Designed for Extreme Conditions

The TR4-X is built for durability, featuring IP68 waterproofing to protect against moisture, dirt, and temperature fluctuations. Whether mounted in a meter pit, utility enclosure, or outdoor setting, the TR4-X ensures long-term performance without risk of water damage.

Seamless Wireless Communication

Powered by NextCentury Connect™, the TR4-X ensures strong, long-range connectivity with intelligent routing capabilities. It offers effortless integration with NextCentury Gateways and Repeaters for real-time meter data.

Meter+™ Technology

Meter+™ Technology enables the TR4 to connect with nearly all modern submeters. Its Smart Pulse detection identifies and corrects ghost pulses caused by faulty reed switches, ensuring accurate readings.

Key Benefits

- Fully waterproof (IP68 rated)
- Easy setup with magnet-based configuration
- Works with pulse & encoded meters
- Simple installation
- Instant feedback for quick diagnostics
- Seamless integration with other NextCentury products
- 10-year battery life
- Field replaceable battery
- Compact, durable design
- Quick setup via mobile app

Warranty

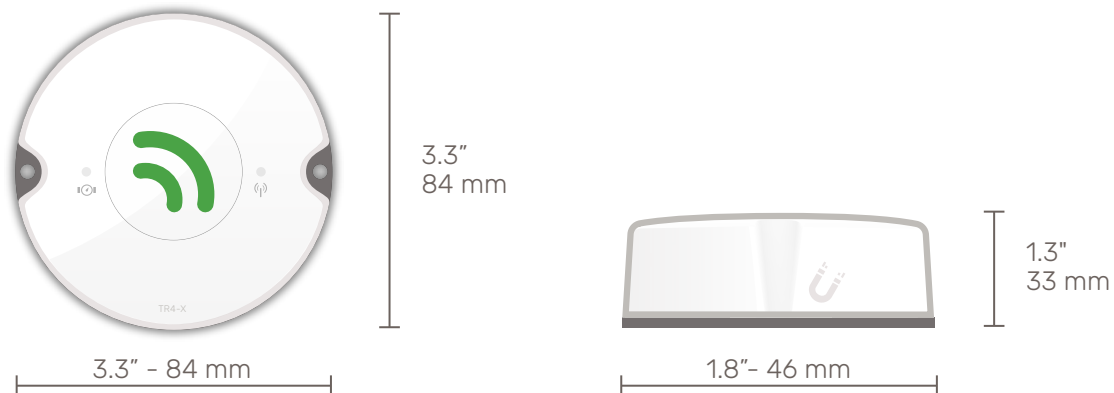
- 3-year standard warranty

Specifications & Installation Guide



Specifications

Dimensions



Approvals

FCC ID: 2AB81-TR4X

IC: 20949-TR4X

Wireless Communication

Two-way NextCentury RF Connect™

902-928 MHz Unlicensed Band

Meter Compatibility

Pulse or encoded meter types

Single model supports all configurations

Wire Connection

5' (1.5m) wire lead

Bare wire, field splice required

Battery

Preinstalled, field-replaceable CR18505

10-year battery life assuming operating temperatures between 60°F-90°F, and 6-hr device check-in.

Operating Environment

-20°C to 60°C (-4°F to 140°F)

IP68 rated for outdoor installations

Compatible Pulse Output Meters

Passive pulse sensing (including reed switch, solid-state relay, contact relay, open-drain types)

Active voltage sensing (max. 16 VDC)

Compatible Encoded Output Meters

Neptune (Including ProRead, ECoder, and ProCoder register models)

Sensus UI-1203 (Includes most meter models, from Sensus, Hersey, Mueller, Master Meter, Badger, Kamstrup, Elster, Metron-Farnier, and Zenner)

GWF ECO (Includes all GWF encoder meters)

Elster/AMCO K-Frame (Includes most meter models, from Elster, AMCO, ABB and Kent)

Warranty

Next Meters warrants the TR4-X Transceiver to be free from defects in materials and workmanship for a period of three years from date of manufacture when installed in accordance with these instructions and with limitations as detailed in the complete warranty.

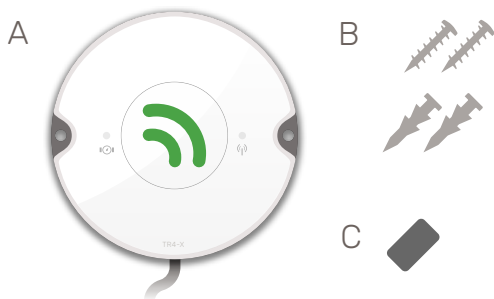
Due to continuous product improvement and the need to comply with evolving regulations, Next Meters reserves the right to modify product specifications without prior notice.

Specifications & Installation Guide



Installation

Package Contents



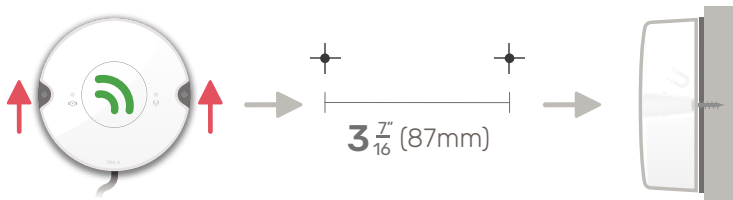
A) TR4-X (Qty: 50)

B) Mounting hardware (Qty: 100)

C) Activation Magnet (Qty: 1)

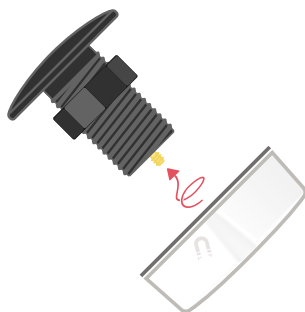
Mounting on a Wall

Secure the TR4-X to a wall using the included screws and anchors.



Pit Lid Mount (Optional Accessory)

For meter pits, install the Pit Lid Mount on a compatible non-metallic lid. Secure the TR4-X using its underside threads.



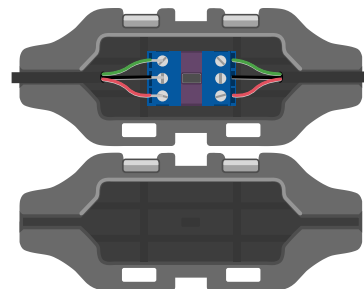
Meter Wire Splice Connection

The TR4-X includes a 5' (1.5 m) wire lead for meter connection. Splice the meter's output wire to the TR4-X using a waterproof connector like the Field Splice Kit (FSK).

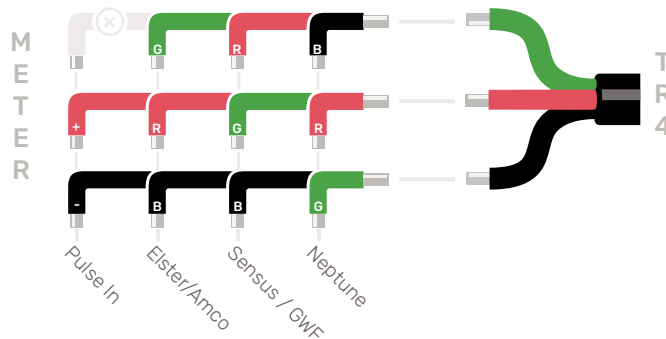
Field Splice Kit (Optional Accessory)

The Field Splice Kit (FSK) provides a 3-pole connection for splicing TR4-X and meter wires. A waterproofing compound seals the connection when snapped shut.

Strip 1/8" (3mm) of insulation. Insert wires into the terminal block, matching the meter's wire mapping. Tighten terminals with a small flat-head screwdriver. Place the connector in the Field Splice Kit cover, then test and verify before closing (page 4).



Wire Color Mapping



Specifications & Installation Guide

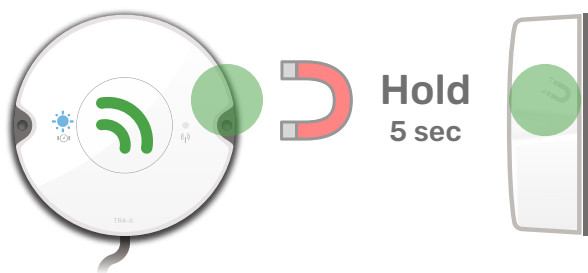


Installation (cont.)

Configuring Meter Type

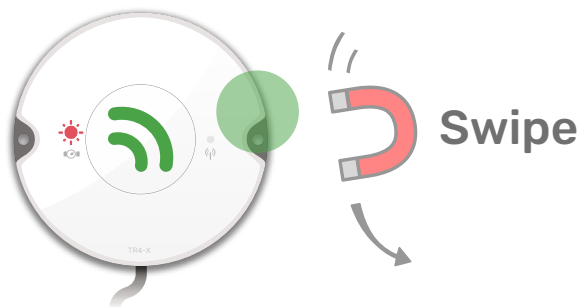
The TR4-X supports pulse and encoded meters, and is pre-configured for pulse by default. Use a magnet to switch configuration.

Hold a magnet to the TR4-X's right side for 5 seconds to enter Configuration Mode. The Meter LED lights up blue or red to indicate the current setting.

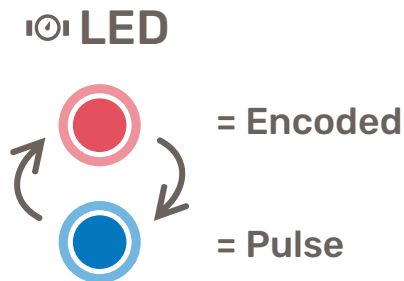


Toggle Pulse or Encoded Mode

Swipe the magnet to toggle between Pulse Meter (red) and Encoded Meter (blue) configurations.



Once the desired mode is set, remove the magnet. The meter type is accepted after 5 seconds, and the LED turns off.



Verify Pulse Meter Connection

A pulse from the connected meter is indicated by a fast blue blink of the Meter LED. As the meter increments with usage, watch for this blue blink to verify the installation.



Verify Encoded Meter Connection

Swipe a magnet in the detect zone to initiate a meter read. A green blink confirms a successful read. A red blink means the meter couldn't be read and wiring should be checked.



Programming

Use the NextCentury website or NCSS mobile app to set up and configure properties, units, and meters before installation. Scan the barcode on the TR4-X to associate the Transceiver to the meter it is reading.

After programming, the connected Gateway will automatically sync and communicate with the TR4-X.

Wireless Connection LED Indicators

The RF LED indicator provides feedback to easily check that the TR4-X is within range of the property's Gateway (either directly, or through Repeaters).

Swipe a magnet next to the TR4-X. The RF LED blinks red while transmitting and green twice when successfully connected to the Gateway.



Specifications & Installation Guide



Installation (cont.)

Wireless Troubleshooting

If the RF LED does not blink green after swiping the magnet, the TR4-X is not receiving a response from the Gateway. Ensure it's programmed to the property and the Gateway is online.

Try multiple times. If a response is eventually received, or if moving the TR4-X closer to the Gateway helps, a Repeater may be needed to strengthen the network.

Contact Information

For additional information or assistance, please visit support.nextmeters.com or contact our Product Support Team:

(844) 538-8203

support@nextmeters.com