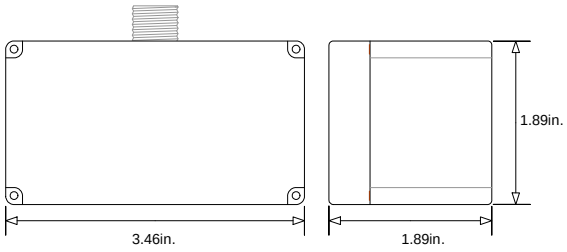
ERDRC-TPP Installation Guide

This guide cover the models ERDRC-TPPC-120/277and ERDRC-TPPC -120/347. The ERDRC-TPPC is equipped with EnOcean 315MHz radios.

NOTE: ELECTRICAL SHOCK HAZARD; All models of the ERDRC -TPP use High Voltage and should only be installed by a qualified installer or electrician. Follow all applicable electrical codes in the country of installation.

Mounting the ERDRC-TPP

The ERDRC-TPP is mounted to an electrical junction box or panel with a ½" threaded nipple. The antenna for the device is embedded in the housing requiring the ERDRC-TPP to be mounted on the outside of the junction box.



The ERDRC-TPP products are intended to be used with EnOcean receivers. Locating the ERDRC-TPP transmitters to work with the receivers requires planning. Careful consideration should be made for locating the ERDRC-TPP transmitter based on the construction materials in the space and possibility of tenant's furniture disrupting the transmissions. Please refer to the range planning guide downloaded from www.echoflexsolutions.com/files/Reliablerangeplanning_0308.pdf

Wiring the ERDRC-TPP:

Power to the transmitter is connected between the White (Neutral) and the Black (120V). Optionally, based on model number, commercial voltages are applied between the White (Neutral) and the Brown(277V) or Yellow(347V). (See wiring diagram).

Use only approved wire. Cap off all unused wires.

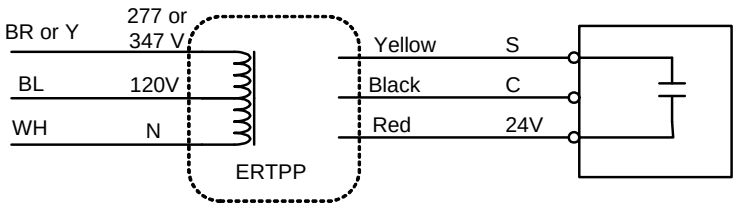


Diagram 1: Wiring diagram for ERDRC-TPP

	Connection	Color	Description	Specifications
High Voltage	Neutral – line voltage	White	Power input connection	18AWG Stranded
	120 VAC line voltage	Black	Power input connection	18AWG Stranded
	277 VAC line voltage*	Brown	Power input connection	18AWG Stranded
	347 VAC line voltage*	Yellow	Power input connection	18AWG Stranded
Low Voltage	Common	Black	Power output to sensor	22AWG (300V)
	24 VDC +	Red	Power output to sensor	22AWG (300V)
	Control Signal	Yellow	Control input sensor	22AWG (300V)

*not used in all models

Operating Mode: The ERDRC-TPP transmitter will transmit status of the control input from a remote sensor or switch via an EnOcean telegram. The ERDRC-TPP will continue to transmit status on a heartbeat timer every 100 seconds or on change of status.

Diagnostic LED's and buttons

Teach button – The ***Teach*** button can be used to learn the ERDRC-TPP transmitter to an EnOcean receiver.

1. Place the receiver into LEARN mode by pressing the LEARN button on the receiver. Insert a pen into the ***Teach*** hole on the ERDRC-TPP depressing the button for a half second. The ERDRC-TPP will transmit its teach command to the receiver.

2. To exit LEARN mode, depress the LEARN button on the receiver again for a half second.

Repeater Enable button – The ***repeater enable*** button can be used to turn on the repeater function of the ERDRC-TPP. When enabled, the ERDRC-TPP will repeat all EnOcean transmissions that are within range. The repeater led indicates whether this is enabled.

LED's – The table below defines the LED activity and the associated mode of the transmitter.

Description	Repeater led	Status led
Repeater enabled	ON	n/a
Repeater disabled	OFF	n/a
Signal Input inactive	n/a	ON solid
Signal Input active	n/a	Blinking

Hardware Specifications

Power Supply	120/277 VAC or 120/347 VAC
Power Consumption	1.0 W
Inputs	Teach and Repeater Enable buttons
Communications	315 MHz or 868 MHz EnOcean radio
Antenna	Integrated whip

Mechanical Specifications

Operating Temperature	14 F to 113 F (-10 C to 45 C)
Relative Humidity	5% to 95% RH (non-condensing)
Weight	13.5 oz (385 gms.)
Dimensions	3.5" x 1.9" x 1.9" (88 mm x 48 mm x 48 mm)
Mounting	½" nipple

Agency Listing and Compliance

Safety

ETL Recognized Component 3188207
Conforms to UL Standard 508
Certified to CAN/CSA Std. C22.2 No.14

UL 2043 Plenum rated

Radio Frequency

FCC Part 15.231 - Remote Control Transmitter
IC RSS-210