EN1723 Dual Input Temperature Transmitter
Installation Instructions

1 Overview

The Inovonics EN1723 dual input temperature transmitter provides internal measurement and external thermistor options in a single device. The on-board sensor is excellent for monitoring ambient indoor temperature, and the external sensor is user selectable to match your application.

1.1 Inovonics Contact Information

For product and installation videos visit us at www.inovonics.com/videos or use the QR code below.

If you have any problems with this procedure, contact Inovonics Wireless technical services:

- E-mail: support@inovonics.com.
- Phone: (800) 782-2709.

1.2 Dual Input Temperature Transmitter Internal Components

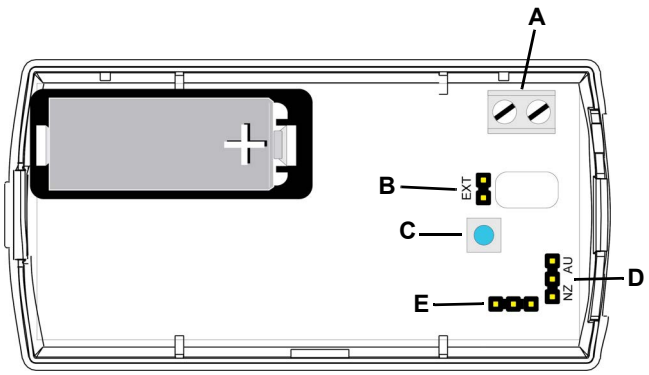

Figure 1 Dual input temperature transmitter internal components

A Terminal block
B External thermistor selection pins
C Reset button
D Frequency band selection pins
E Programming header

2 Installation and Startup

2.1 Installation Notes

- These products are designed to be installed and maintained by professional security technicians.
- Products are intended for indoor use.
- Manually test all products weekly.

2.2 Install the Battery

1. Pry the top lip of the mounting bracket up, and lift the bracket off of the transmitter.
2. Use your thumb to depress the housing release tab on the bottom of the transmitter; separate the housing.
3. Install the battery.
4. Press the reset button to initialize the transmitter.

Note: When disposing of this device or depleted batteries, please do so in accordance with federal, state and local regulations.

2.3 Mount an External Thermistor

The transmitter uses an on-board thermistor. If you are not using an external thermistor, skip to section 2.4, “Select the Frequency Band”; if you are using an external thermistor:

1. Wire the external thermistor using 24-gauge wire, no more than 40 feet long.
2. Route the external thermistor wiring through either the rectangular cutouts on the back of the housing and bracket, or through the rounded wiring cutout at the top of the housing.

Note: If you want to use the cutout at the top of the housing, you will need to trim the bracket.

3. Use a small screwdriver to attach the external thermistor wiring leads to the terminal block.
4. Place a jumper on the external thermistor selection pins, allowing the transmitter to use the external thermistor in addition to the on-board thermistor.
5. Press the reset button to complete configuration.

2.4 Select the Frequency Band

EchoStream products are able to use a range of radio frequencies, and is shipped from Inovonics set for your geographic area.

- The jumper will be set on on the two pins marked NZ to set the frequency range to 921-928 MHz for New Zealand.
- The jumper will be set on the two pins marked AU to set the frequency range to 915-928 MHz for Australia.
- The jumper will be removed to set the frequency band to 902-928 MHz for North America.

1. Ensure the frequency band is set for your geographic are.
2. If the frequency band is not set for your geographic area, place a selection jumper on the appropriate frequency band selection pins to select Australia or New Zealand, or remove it for North America.
3. If you have changed the frequency band, press the reset button to complete configuration.

Caution: When pressing the reset button, make sure you don’t also touch the frequency band selection pins. Touching the frequency band selection pins while pressing the reset button can inadvertently set the single input universal transmitter to the wrong frequency band.

2.5 Program the Transmitter

EN1723 transmitters are programmed at the factory. It is not usually necessary to reprogram EN1723 transmitters. If you want to reprogram the transmission interval, temperature measurement interval and/or temperature units, the parameters can be changed using the programming header and the ACC17XX programming cable. Contact Inovonics technical services for details.

2.6 Mount the Transmitter

1. Attach the mounting bracket to the wall, using either screws or double-sided tape.

Note: There are two mounting holes for standard installation. An optional third mounting hole is located under the battery. Use the third mounting hole to secure the housing to the bracket.

2. Hook the bottom of the transmitter into the bracket’s bottom catch, and press the transmitter into the bracket so that the bracket’s top lip snaps into place.

3 Specifications

Dimensions: 3.5” x 1.7” x 0.9”.

Typical battery life: 8 years at a 5 minute transmission interval.

Battery type: Panasonic CR123A or equivalent.

Operating environment: -4° to 140°F.

Operating humidity: 0 to 90%, non-condensing.

Temperature measurement: Internal measurement transmitted as: Fahrenheit or Celsius; internal measurement range: -13° to 140°F; typical accuracy: 0.8°F at room temperature.

External measurement: Transmitted as: temperature or resistance; external thermistor temperature range: -22° to 212°F; external thermistor resistance range: 100 to 250,000 ohms; typical external resistance measurement accuracy: + or - 1% from 100 ohms to 500 ohms, + or - 0.5% 500 ohms to 250K ohms.

Configuration options: Measurement intervals: 0.5, 1, 5, or 30 seconds, 1, 5, or 15 minutes, or only on transmit; transmission intervals of 10 or 30 seconds, 1, 2, 5, 10, 15 or 30 minutes; Delta T value of 0.5, 1, 5, or 10 degrees or % resistance (Delta T can be disabled).

System requirements: Requires use of the EN4000 serial receiver and an application designed to support advanced functionality.

Operating frequencies: EchoStream: 902 - 928 MHz North America, 915 - 928 MHz Australia, 922 - 928 MHz New Zealand.

Regulatory compliance: FCC; RoHs compliant; Industry Canada; RCM.

Note: The transmitter output power level is the same for North America, Australia and New Zealand.

Note: Inovonics supports recycling and reuse whenever possible. Please recycle these parts using a certified electronics recycler.

Note: Specifications and data are subject to change without notice.

4 Television and Radio Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

5 FCC Part 15 and Innovation, Science and Economic Development Canada (ISED) Compliance

This device complies with part 15 of the FCC Rules, and ISED license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6 Radiation Exposure Limits

6.1 FCC

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm during normal operation and must not be co-located or operating in conjunction with any other antenna or transmitter.

6.2 ISED

This equipment complies with ISED RSS-102 radiation exposure limits set forth for an uncontrolled environment. This transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme avec ISED RSS-102 des limites d'exposition aux rayonnements définies pour un environnement non contrôlé. Cet émetteur doit être installé à au moins 20 cm de toute personne et ne doit pas être colocalisé ou fonctionner en association avec une autre antenne ou émetteur.

Note: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: Inovonics commercializes products utilizing open source third party software. For additional information, please visit: https://www.inovonics.com/support/embedded-third-party-licenses/.