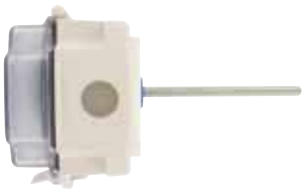
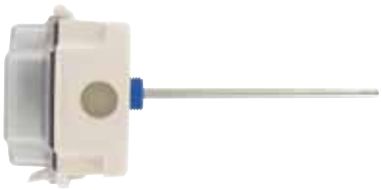
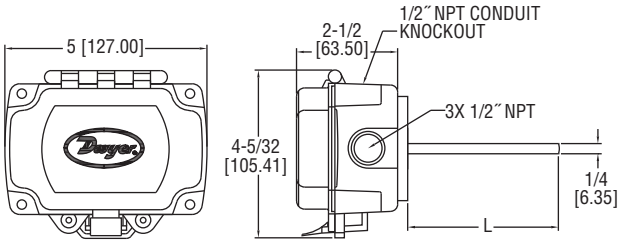
Series WTP Wireless Temperature Sensors

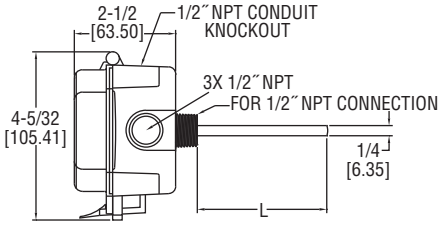
Specifications - Installation and Operating Instructions



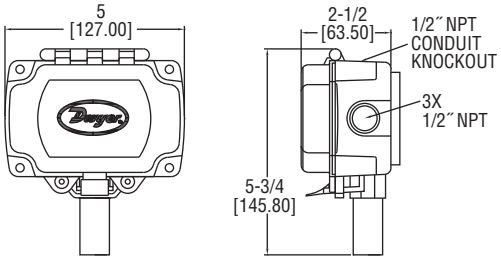




DUCT MODEL



IMMERSION MODEL



OSA MODEL

The Series WTP Wireless Temperature Sensors can be quickly installed on chilled water lines, air ducts or outside a building without having to run additional wiring. By sampling the temperature measurement every 10 seconds, the 3.6 V lithium battery is able to power the unit for up to 8 years.

A reliable 418 MHz signal can carry the measurements up to 100 feet without a repeater. With the optional 900 MHz repeater, measurements can be transmitted up to 1000 feet away.

NOTICE **When inserting batteries, observe polarity markings inside unit for proper operation.**

NOTICE **It is best to train output modules before mounting the transmitters.**

SPECIFICATIONS
Temperature Range: -40 to 185°F (-40 to 85°C).
Accuracy: ±0.3°C.
Temperature Limits: 32 to 140°F (0 to 60°C).
Humidity Limits: 5 to 95% RH non-condensing.
Power Requirements: 2 AA 3.6V lithium batteries.
Transmitter Interval: Approximately 10 seconds.
Housing Material: ABS plastic.
Enclosure Rating: UL 94 V-0, NEMA 4X.
Antenna: 418 MHz - Built inside enclosure.
Weight: Duct/OSA: 1.25 lb (566 g); Immersion: 0.8 lb (363 g).
FCC Approval: FCC ID# T4F06811RH.
Agency Approvals: RoHS.

DWYER INSTRUMENTS, INC.
P.O. BOX 373 • MICHIGAN CITY, INDIANA 46361, U.S.A.
Phone: 219/879-8000 **www.dwyer-inst.com**
Fax: 219/872-9057 **e-mail: info@dwyer-inst.com**

MOUNTING

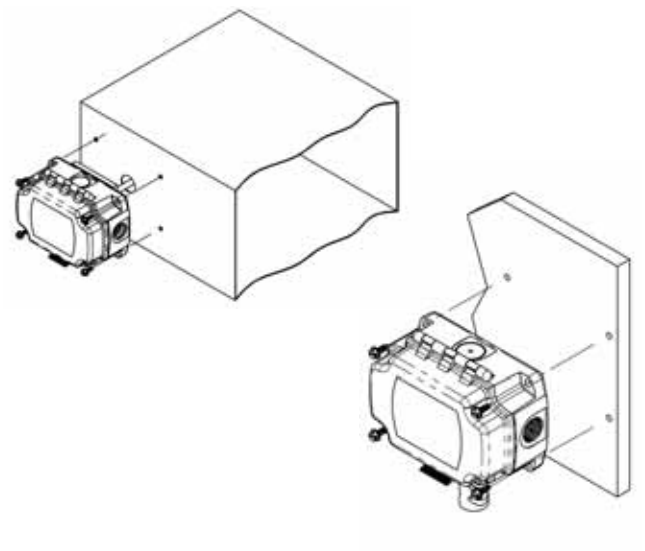


FIGURE 1: Mounting Diagram

OSA/Duct Sensors

Mount unit to surface using four #10 screws through the holes in the mounting feet. For concrete or cinder block, pre-drill four 5/32″ (4 mm) holes to 1-3/4″ (45 mm) depth. On duct models, only compress gasket half of original thickness. Follow Orientation as shown in Figure 2.

FIGURE 2: OSA Mounting Orientation

Insertion Sensors

Thread 1/2″ connection into 1/2″ NPT thermowell until sensor bottoms out against well.

Training Output Models

- Attach desired output modules to receiver as described in output module manual.
- Apply power to the receiver and output modules (LED on receiver should be lit. LED on output module will flash and go out).
- Remove cover of sensor and install the batteries (observe polarity). LED next to the transmitter training button will flash every 10 seconds.
- Press and hold the plastic service button on the output module to be programmed. At the same time, press for one second and release the button on the sensor. When the LED on the output module lights, release the service button. The LED on the output module will go out after the button is released.
- Output module LED will flash when it receives data from sensor.
- Close cover when all of the output modules have been trained.

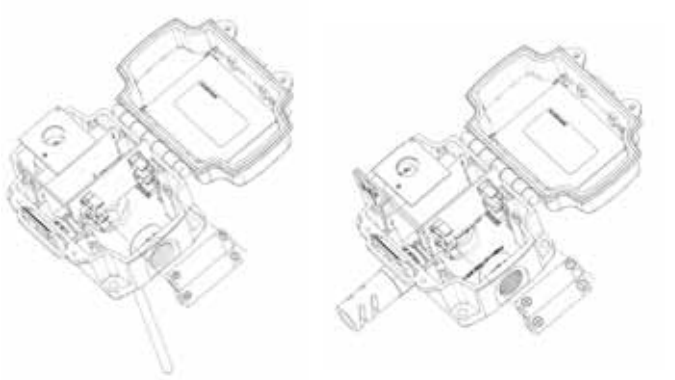


FIGURE 3: Battery Polarity

DIAGNOSTICS

Error	Required Action(s)
Temperature or humidity reading is incorrect	• Check wire from output modules to controller for proper connections and polarities. • Check to see if the controller's software is configured correctly. • Check transmitter to see if its LED flashes every 10 seconds. If not, change batteries. • Check power to the receiver and output module. • Check output module LED. If blinking fast, retrain output module.
Temperature or humidity reading is coming out of wrong output module	• Retrain output module.

MAINTENANCE, CLEANING AND REPAIR

After final installation of the unit, no routine maintenance is required. A periodic check of the system calibration is recommended. The Series WTP is not field serviceable and should be returned if repair is needed (field repair should not be attempted as it may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

Printed in U.S.A. 12/09 FR# R6-443756-00

DWYER INSTRUMENTS, INC.
P.O. BOX 373 • MICHIGAN CITY, INDIANA 46361, U.S.A.
Phone: 219/879-8000 www.dwyer-inst.com
Fax: 219/872-9057 e-mail: info@dwyer-inst.com