



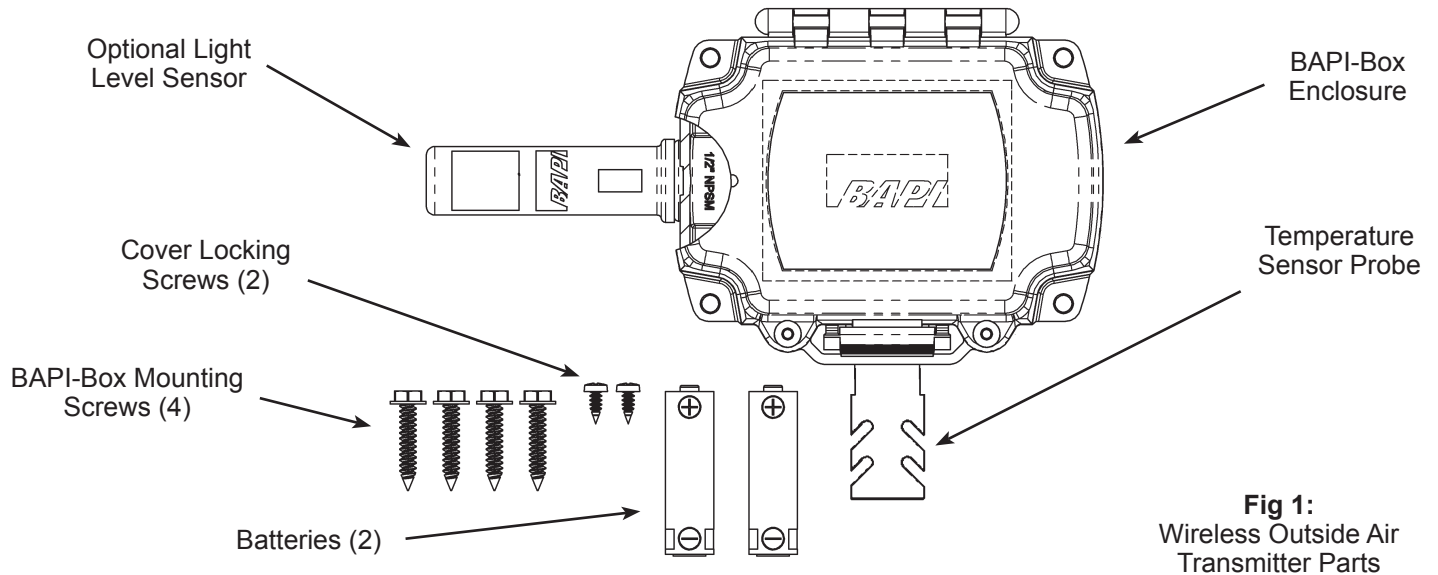
Wireless Outside Air Temperature, Barometric Pressure and Optional Light Level Transmitter, 900 MHz

Installation & Operations

40230_G2_wireless_outside_temp

rev. 02/07/18

Parts Received

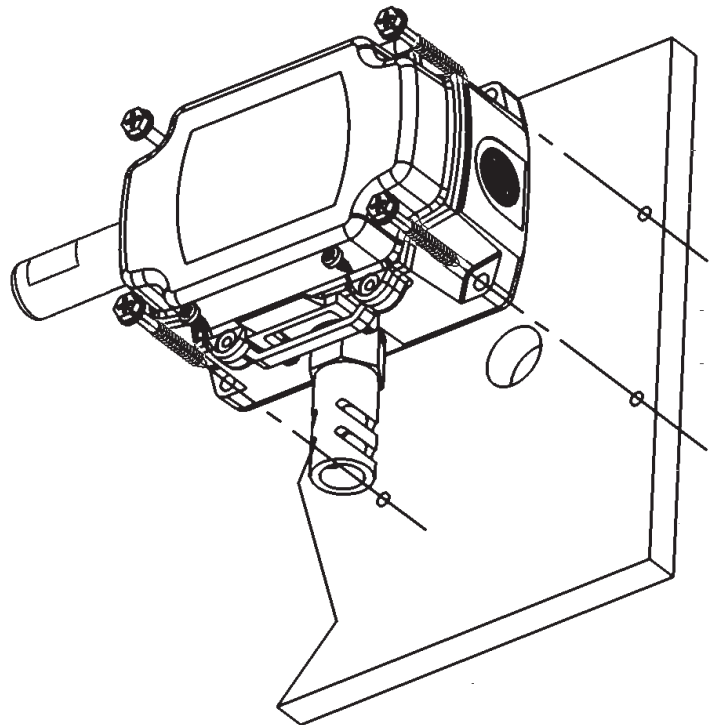


Mounting

Outside Air sensor placement is critical to good performance. The sensor must be mounted in the shade away from building windows, doors or vents. They should never be in direct sunlight or you will have higher than expected temperature readings by as much as +30%. The ideal shaded location in the Northern hemisphere is on the North side of the building. In the Southern hemisphere the South side of the building is ideal.

The sensor shield and probe should always point down and mounted between four feet above the ground/roof and one foot minimum below the eave. (Note: Four feet keeps the sensor above the ground or roof top radiation and one foot under the eave prevents measurement of trapped heat from under the eave.) Drill the mounting holes and mount as shown in the Fig. 2.

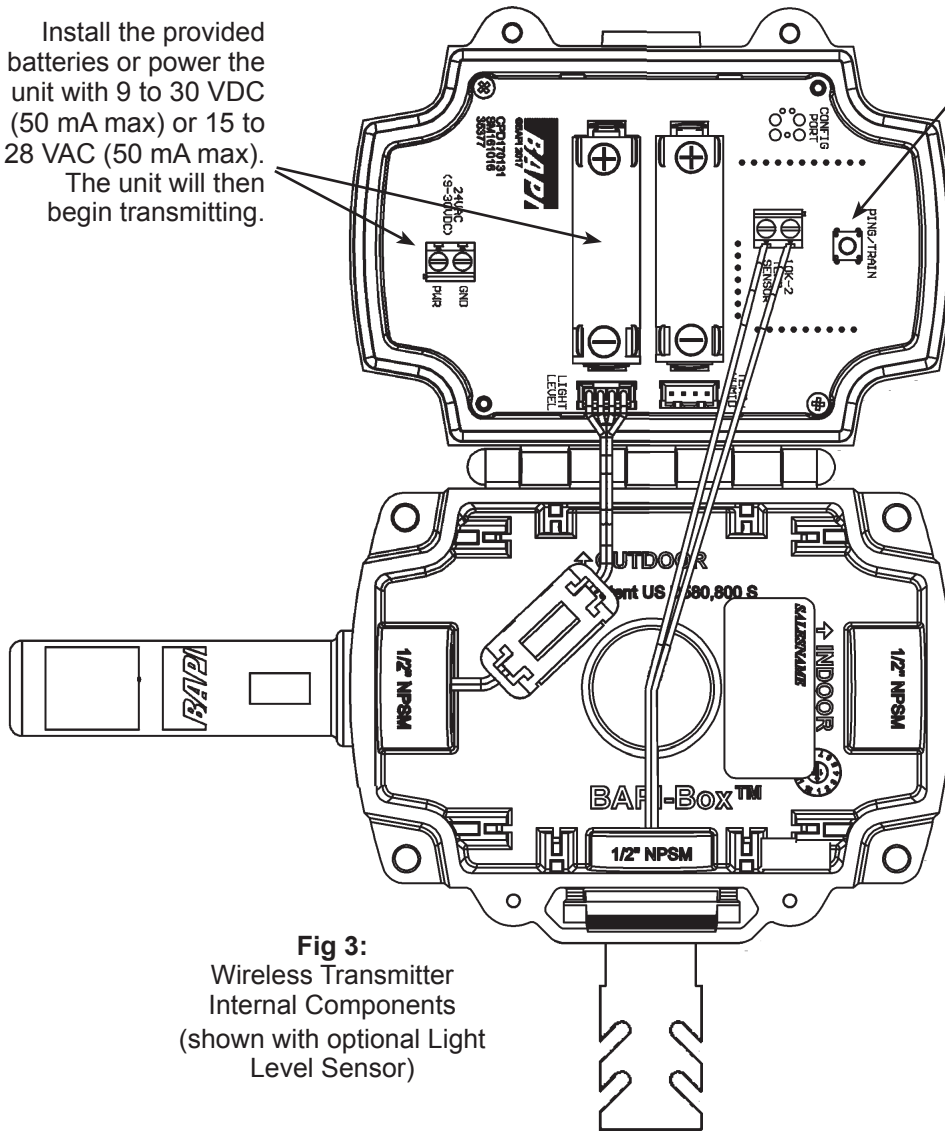
For units with the optional light level sensor, make sure that other equipment on the building cannot physically or mechanically obstruct the sensor. Do not mount under awnings or other projections within 15 feet.



Specifications subject to change without notice.

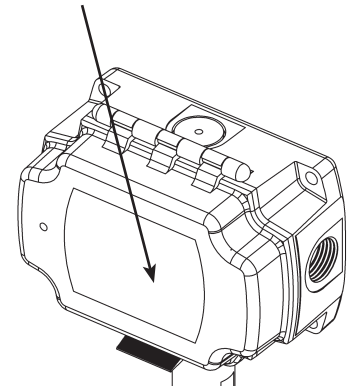
Operation

Install the provided batteries or power the unit with 9 to 30 VDC (50 mA max) or 15 to 28 VAC (50 mA max). The unit will then begin transmitting.



Pressing the “Ping/Train” button on the circuit board will force a transmission.

A green LED on the face of the unit flashes after each transmission.



Note: The unit is factory set to transmit once every 5 minutes.

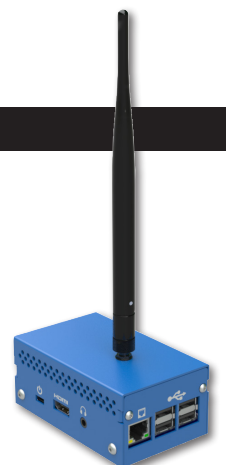
The transmission rate can be changed via the receiver/gateway network interface (as described in the gateway instruction sheet (39021_RCV_900_BACnet.pdf).

Fig 3:
Wireless Transmitter
Internal Components
(shown with optional Light
Level Sensor)

Associated Gateway/Receiver

The Gateway receives the data from transmitters up to 275 feet away, and provides the data to the BAS via multiple communication options (TCP/IP, JSON, BACnet IP). The Gateway also sends a confirmation signal to each transmitter upon a successful reception of data, allowing the transmitter to release the data that it has stored in memory so that no data is lost during a signal interruption. Operation of the Gateway is described in the Gateway instruction sheet (39021_RCV_900_BACnet.pdf)

Fig. 4:
Gateway/Receiver



Specifications subject to change without notice.



Wireless Outside Air Temperature, Barometric Pressure and Optional Light Level Transmitter, 900 MHz

Installation & Operations

40230_G2_wireless_outside_temp

rev. 02/07/18

Wireless Sensor Reset

Pressing the "Ping/Training" button on a wireless sensor for 15 seconds will reset the sensor to the original factory default settings (which are accessed through the associated Gateway receiver). This reset procedure can be used to re-establish communication between the sensor and the Gateway if communication is lost due to mismatched addresses. The address of the sensor will be reset to the default: 42415049. This default address can then be entered for the Gateway (as described in the Gateway instructions document "39021_RCV_900_BACnet.pdf") to re-establish communication with the sensor. Once communication is established, the address of the Gateway and the sensor can be returned to the previous address to re-establish communication with the other sensors on the network (as described in the Gateway instructions document "39021_RCV_900_BACnet.pdf").

Besides resetting the wireless address, the reset procedure will also return the sensor to these default values:

- Channel = 1, 3 • Transmit power = 0 dBm • Reported intervals = 300 seconds • Sample Interval = 300 seconds
- AES key = not affected by the reset procedure • Battery warning Voltage = 2.5 • All offsets = 0

Diagnostics

Possible Problems:

Temperature, Barometric Pressure or Light Level reading is incorrect.

Possible Solutions:

Verify that the controller's software is configured properly.

Make sure the transmitters are within range of the receiver/gateway.

Verify that the green LED visible on the face of the unit flashes when the "Ping/Train" button on the circuit board is pressed, indicating a transmission. If the LED does not flash, replace the batteries.

Verify proper power and termination of the receiver/gateway as shown in the receiver/gateway instructions (39021_RCV_900_BACnet.pdf) available on the BAPI website.

Check that the receiver/gateway's yellow LED to the left of the Ethernet cable jack is illuminated and that the green LED to the right is blinking indicating a good Ethernet network connection and network activity.

Sensor is not communicating with the Gateway

Perform the "Wireless Sensor Reset" procedure as described above and in the Gateway instructions document "39021_RCV_900_BACnet.pdf" available on the BAPI website or by contacting BAPI.

FCC Wireless Certification and Interference Statement

Wireless BAPI-Box Transmitter (WBB900) - FCC ID: T4FWBB900

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.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

Specifications subject to change without notice.