



Wireless Sensors: WNS-TxxxB

Description

WNS-TxxxB is a battery powered, wireless temperature and humidity sensor, with setpoint adjustment and an override pushbutton that transmits sensor data through an enteliMESH wireless network. Each battery powered sensor incorporates a low power radio which meets standards for operating within the ISM 2.4 GHz frequency band. The battery provides up to 5 years of service before replacement.



WNS-TxxxB

Application

Typical applications include mounting in specialized areas that are difficult to wire, such as on solid concrete and marble walls or in atrium, foyers, auditoriums, and architecturally sensitive installations.

Other applications include use in spaces that change periodically such as tenant retrofit areas, or areas that require monitoring, such as data centers.

The WNS-TxxxB has an optional pushbutton and setpoint adjustment. An extra set of terminals allows for remote location of an external thermistor temperature probe, which can be used to retrieve temperatures from inside a cold storage box, environmental chamber, or from an outside location.

Features

- Communication distances up to 30 m (100 ft) indoors and 100 m (340 ft) outdoors
- Built-in 10kΩ thermistor
- Optional built-in humidity sensor
- Optional pushbutton and setpoint adjust
- External Thermistor Input
- Up to 5 year service with high-energy 3.6V lithium battery
- Frequency channel is set via DIP switches
- PAN ID is set via DIP switches
- Device address is set via DIP switches
- LED indicators for battery power, condition and received signal strength
- Stylized housing
- Easy to mount on most surfaces or in any electrical box

Specifications

Communication Ports

ISM 2.4 GHz frequency band, wireless digital spread spectrum 802.15.4 compliant

Thermistor

Thermistor – 10kΩ @ 77°F (25°C)

Temperature Sensor

Accuracy of +/- 0.36°F from 32° - 158°F (+/- 0.2°C from 0 - 70°C)

Stability of 0.24°F over 5 years (0.13°C)

Humidity Sensor (optional)

Accuracy of +/- 2%RH from 0% -100% RH (25°C)

Stability of +/- 1% RH (typical at 50% RH) over 5 years

Pushbutton (optional)

Momentary contact

Setpoint Adjust (optional)

Potentiometer

Technology

16-bit processor

LED Indicators

Radio RSSI
(received signal strength indicator)

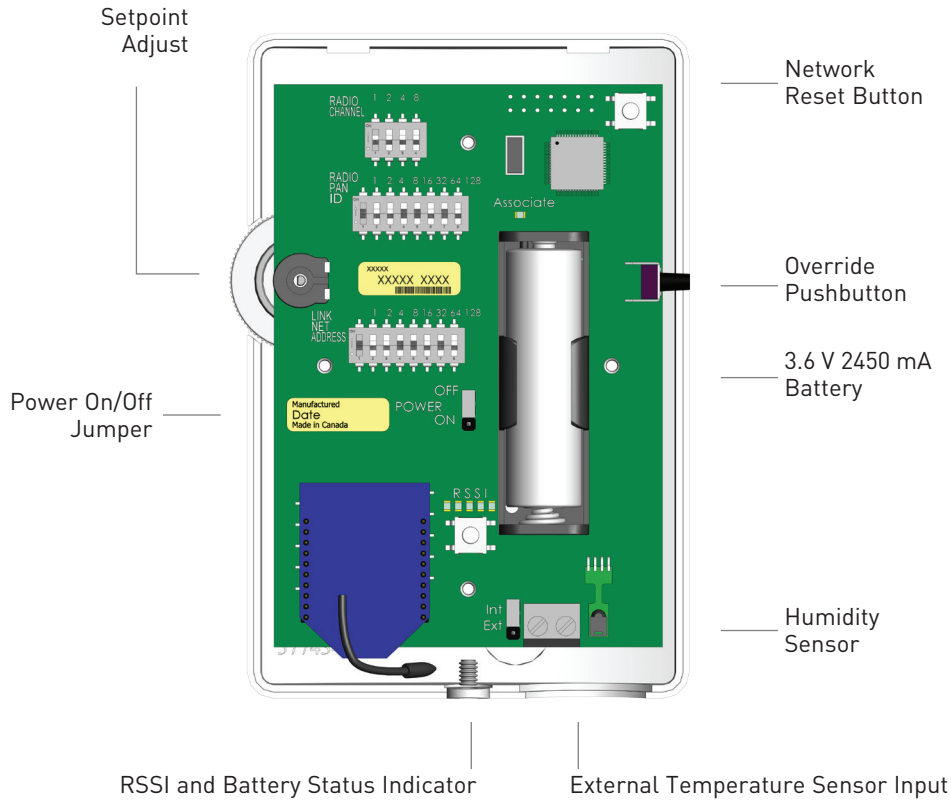
Join Status

Battery indicator

PAN ID

Set via DIP switches

WNS-TxxxB: Board Diagram



Specifications (Continued)

Connectors

Screw-type terminal connectors

Power

3.6V High energy lithium AA battery, 2450 mAh

Ambient

32° to 104°F (0° to 40°C)

10 to 90% RH (non-condensing)

Dimensions

12.5 x 8.3 x 2.5 cm (5 x 3.25 x 1")

0.3 lb. (120 g) with housing

Compliance

CE (ETSI)

IC

FCC, Class B, Part 15

Listings

UL916

Ordering

Order the WNS according to the following product number:

WNS-TB	Stylized Housing, Temperature Sensor, 3.6V Lithium Battery
WNS-THB	Stylized Housing, Temperature Sensor, Built-in Humidity Sensor, 3.6V Lithium Battery
WNS-TPB	Stylized Housing, Temperature Sensor, Pushbutton, 3.6V Lithium Battery
WNS-TPSB	Stylized Housing, Temperature Sensor, Pushbutton, Setpoint Adjust, 3.6V Lithium Battery
WNS-THPB	Stylized Housing, Temperature Sensor, Built-in Humidity Sensor, Pushbutton, 3.6V Lithium Battery
WNS-THPSB	Stylized Housing, Temperature Sensor, Built-in Humidity Sensor, Pushbutton, Setpoint Adjust, 3.6V Lithium Battery

Accessories

BAT-24AA	WNS Replacement Battery, 3.6V lithium, 2450 mAh
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Subject to change without notice.