



WT and WTH Series Wireless RF Temperature and Humidity Sensors

No Wires Io Batteries No Limits

Description

These wirelesss, compact, room temperature sensors are designed fo use with EnOcean based devices and can be part of a building automation system, or used as peer-to-peer standalone control of Spartan Peripheral Devices ME8300 series wireless terminal unit control valve actuators.

Features

- Easy mounting to flat surfaces.
- Reduce maintenance with energy-harvesting, solar powered technology.
- Available in models with temperature only, temperature and humidity, and temperature with setpoint.
- Durable, low-profile, thermostat-style case.

SPECIFICATIONS

Temperature 32 to 104° F) range (0 to 40 °C)

Temperature $\pm 0.9^\circ$ F from 62 to 80° F accuracy $(\pm 0.5^\circ$ C from 17 to 27 °C) Humidity accuracy (WTH series only) + 5% RH from 30 to 70% RH from 32 to 104 F (0 to 40 C)

Setpoint dial 54-90° F (12-32° C) over 270° rotation

Measurement threshold for transmission intervals

Temperature $\pm 0.9^{\circ} \text{ F } (\pm 0.5^{\circ} \text{ C})$

Humidity ±2.0%

Setpoint change ±2.8° F (± 1.57° C)

Transmission Every 100 seconds upon

interval change of measurement threshold.

Between 700 and 1400 seconds without a change of threshold.

Radio interface

Antenna Built-in wire whip
Frequency 902.0 or 868.3 MHz
See ordering information

Output Power 868.3 MHz: +8 dBm1(EIRP) ± 2.5 dB2

902.0 MHz: $+92 dB\mu V/mI \pm 2 dB2$

Agency Approvals 868.3 MHz: R&TTE EN 300 220

902.0 MHz: FCC CFR-47 Part 15

Conforms to CE/ROHS
Contains FCC ID: SZV-STM310C

These 315 MHz devices comply with Part 15 of the FCC rules.

Power

Power supply Energy harvesting solar cell with optional

CR1225 lithium coin cell backup

Time from fully Solar cell only: Typically less than 2.5 minutes with 400 lux

operational of fluorescent or incandescent illumination.

Instantaneous with battery backup

Illumination 50-100000 lux

Operational time in Typically four days at 25° C

in full darkness with solar cell only. Time is based on a measurement every 100 seconds and

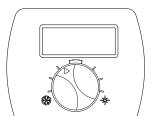
transmission every 1000 seconds.



WT312F, WT812F WTH815F WT912F, WTH915F



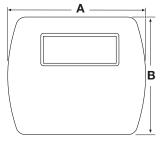
WT813F, WT913F



MaterialWhite flame-retardant plastic

Weight Approx. 1.25 oz. (35 grams)





Dimensions

Α	В	C
2.64 in	2.25 in	0.77 in.
67 mm	57 mm	20 mm

Enocean equipment profiles

A5-02-05 Temperature

A5-10-03 Temperature and setpoint A5-04-01 Temperature and humidity

Environmental Limits

Operating 23° to 113° F (-5° to 45° C) Shipping -40° to 140° F (-40° to 60° C) Humidity 0 to 95% RH non-condensing

Ordering information

For use in North America 902 MHz, White

WT912F Digital Sensor (Wireless, Temperature)

WT913F Digital Sensor (Wireless, Temperature, Setpoint)
WTH915F Digital Sensor (Wireless, Temperature, Humidity)

For use in Europe - 868MHz, White

WT812F Digital Sensor (Wireless, Temperature)

WT813F Digital Sensor (Wireless, Temperature, Setpoint)
WTH815F Digital Sensor (Wireless, Temperature, Humidity)

Optional: Add NL to the part number for No Logo on the cover