

VT3105

Features

- Compact Size
- Large Transmission Range
- -20 to +60 C Temperature Range
- 3 Year Minimum operational Battery Life
- FCC Part 15 Certification (Pending)
- 916.500 MHz Transmission Frequency
- Other Frequencies Available
- Design for use with VT3000 Receiver



Description

The VT3105 temperature/humidity sensor is a compact wireless transmitter device that sends temperature and humidity information to a companion base station receiver (VT3000). The transmission interval is approximately 30 seconds and is dithered using a pseudorandom algorithm to reduce collisions with multiple transmitters. Transmission burst duration is approximately 20 milliseconds.

The transmitter is enabled using a two pin jumper located on the side of the unit. The temperature sensing element is exposed to the environment through holes in the side of the transmitter housing.

Applications

The VT3105 is designed for industrial or home use where wireless sensing of temperature and/or humidity is required. Examples might be in computer rooms/IT closets where temperature/humidity must be maintained 24/7 for the equipment to operate reliably. Other applications might be within large HVAC ducting to sense potential problems before breakdown occurs.

Specifications

Description	Specification	Comments
Frequency (MHz)	916.500	
Power Out (dBm)	0	(50 Ohm Load)
Outdoor Range (Ft)	400-600	Clear line of sight
Indoor Range (Ft)	100 to 300	
Antenna	Internal Loop	External Available
Temperature Range (°C)	-20 to +60	0 to +140 °F
Temperature Accuracy (°C)	±1.0	0 to 50 °C
Temperature Accuracy (°C)	±3.0	-20 to 0 °C
Humidity (%RH)	0 to 100	Condensing
Humidity Accuracy (%RH)	±4.0	20 to 80 %RH
Humidity Accuracy (%RH)	±6.0	0 to 19 and 81 to 100 %RH
Battery Life (Years)	3	Under normal operating conditions
Shelf Life (Years)	5	
Size (inches)	1.5W x 2.0L x 1.0D	
Transmission Duration (msec)	21	Approximate
Transmission Interval (s)	30	±2s, pseudorandom
Bit Rate (Baud)	9600	104.2us per bit