

Product Description

The WEMSduct sensor is a battery powered wireless sensor for WEMS Internationals wireless building energy management system. Designed to measure the temperature conditions in duct ventilated systems. The sensor element in the end of a rigid brass tube which is mounted in the air duct.



i For product operation and installation information please refer to the WEMSduct sensor user manual.

Features

- Accurate temperature readings
- High performance wireless narrow band operation
- Up to 2Km line-of-sight range
- Multi-hop wireless protocol
- License-free use
- 69 selectable RF channels
- IP65 rated
- Conformal coated to protect against condensation
- Long battery life

Compliance

EMC

- EN 55022: 2006
- EN 61000-4-3: 2006
- EN 61000-4-2: 2001

Safety

- EN 60950: Information technology equipment
- EN 60730: Automatic electrical controls
- EN 50366: Domestic equipment

Wireless

- EU R&TTE directive for 25kHz
- EN 300 220: EMC standard for short range devices
- EN 301 489: EMC standard for radio equipment and services

Specifications

| | |
|-------------------------------|-------------------------------------------------------|
| Operating Temperature Range | -10 to +60 DegC |
| Operating Humidity | < 75% RH (Non condensating) |
| Storage Temperature | -20 to +85 DegC |
| Storage Humidity | < 90% RH (Non condensating) |
| Supply Voltage | 9VDC |
| Supply Source | Lithium PP3 (U9VL-J, U9VL-X, U9VL-FP, U9VL-FP & ER9V) |
| Current Consumption Average | ~5uA |
| Current Consumption Peak | 25.4mA |
| Battery Life Expectancy | up to 5 years, dependent on settings and environment |
| Temperature Sensor Resolution | 0.1 DEGC |
| Temperature Sensor Accuracy | +/- 1 DEGC |
| Temperature Sensor Range | -10 to +80 DEGC |
| RF Frequency | 433.05 - 434.79MHz |
| RF Output | 8dBm max |
| RF Sensitivity | -115dBm |
| RF Bandwidth | 25kHz (Narrow band) |
| RF Channels | 69 |
| Antenna connector | Female 50Ω SMA (SubMiniature version A) |
| Weight | TBA |
| Enclosure | Flame retardant polycarbonate, IP65 |
| Mounting | Direct surface mount, 4x mounting holes |

Dimensions

