

AIRSENSE - ENVIRONMENTAL SENSOR NODE

The AirSense provides a full range of real time environmental sensing options to enable indoor environmental quality monitoring. These sensors enable comprehensive visualisation and mapping of the indoor environment, enabling smart decisions to be made to deliver energy savings along with productivity and health improvements.

Temperature and Humidity are optionally supplemented with sensing of:

- Barometric Pressure
- Carbon Dioxide (CO₂)
- Volatile Organic Compounds (VOCs)
- Occupancy
- Air Quality - air particle to 0.5um
- Light Quality - spectrum and intensity
- Smoke detection
- Noise level



Power Supply:

Input: 8-36V DC, 70mA, <1W

Sense Options:

Temperature:	±0.1°C, -40 to +85, Response ~2s
Humidity:	1.5% RH to 80%, 2% RH to 100%. Response ~8s
Pressure:	260 - 1260 hPa ±0.1hPa Response ~1s
Carbon Dioxide	400ppm - 60,000ppm. 1 ppm (400 - 1480ppm) Response ~1s
Volatile Organics	0 - 60,000ppb. 1 ppb (0-2,000ppb) Response ~1s
Occupancy	5m Omni-directional
Dust	PM2.5 & PM10 0 - 1,000 ug/m ³
Light	400nm - 680nm, Flicker
Smoke	Photoelectric
Sound	100Hz - 80kHz, 94 dB SPL

RF Module:

RF Band:	ISM 2.405 - 2.48GHz Band
RF Standard:	IEEE 802.15.4
Effective Range:	100m between nodes

Environmental:

Operating Temp:	-30°C to +85°C
MTBF	2,100 Million hrs (25°C)
Rating:	IP20

Additionally, the sensor node includes an audio output that can provide various alert signals, in the event that certain trigger points are exceeded.

Information is transmitted via the Compuspec Autonomous Mesh Network (A-Net) for monitoring or control within the facility.

Although networked, the sensor can operate autonomously of any central system and interact with local IntelliSUN lighting and control nodes to change environmental conditions depending upon certain target criteria.

Local decisions can be made based upon global goals without the reliability of the system being dependent upon any one element.

Applications:

Schools, Hospitals, Institutionalised Care.

Mechanical:

Body material: ABS Plastic

Dimensions: 80mm x 80mm x 20mm

Weight: Approx 0.25kg