



OPTIEM.ENERGY
CORPORATION

DATA SHEET



ENISCOPE AIR SENSE

Multi-functional, surface-mounted IoT sensor.

Overview

Eniscope Air Sense is a versatile sensor, offered as part of our Eniscope Air suite of products.

Battery or mains powered and mounted on a wall or ceiling, the Air Sense product has a raft of sensory features - including occupancy, light levels, temperature, and humidity.

Application

The Air Sense is perfect when used in conjunction with other energy saving technologies - like air conditioning scheduling and control technologies - to help optimise their performance based on real-time data from the implementation area.

But it also stands alone as a real-time environmental sensor with huge value potential - allowing operators to optimise working conditions and air quality for staff, and the comfort of their customers.

The Specifics

The Air Sense product offers autonomous update rates of 1 to 60 minutes depending on the operator's preference, and is powered either by lithium batteries for convenient replacement or straight from the mains. Stylishly designed and easily mounted without the need for an electrician, it can operate effectively in temperatures ranging from -20°C to 60°C.

This device uses RF communication, utilising the Eniscope Air Connect to provide connectivity to the master Eniscope system, without the need for a WiFi connection.

Core Functionality



Temperature Sensing

Humidity Sensing

Occupancy Sensing

Light Sensing

Key features

Supply Voltage (AD101/1)	100 – 277 VAC -10%/+6% (internally fused) or, 5 to 30V AC/DC - 0.1 amps
Fuse Rating (AD101/1)	100 – 277 VAC - 15mm 1 amp, Littelfuse 209 series
Power Requirements (AD101/1)	Less than 0.1 amps
Battery Specifications (AD101/2)	Cell Size R6-AA Lithium-thionyl chloride Li-SCoI2 Voltage 3.6V Recommended battery type SAFT 14500
Battery quantity	Maximum of 5 cells
Battery life	2 cells, 5-minute update rate = 10 years 5 cells, 1-minute update rate = 5 years
Relative Humidity	0-100% RH
Relative Humidity Accuracy	+/- 2%
PIR	Maximum mounting height 7 Meters Detection angle 46° Maximum detection range 12 meters Yellow PIR activation LED

Temperature Range	-20°C to +60°C
Temperature Accuracy	+/- 0.2°C
Light Levels	16 bit A-D, Range scalable in Analytics platform-
Powered Analogue Inputs x 4	Settable 0-10V, 0-1V, 4-20mA Maximum external device supply current 5mA, 3.3V
Pulse Input x 1	2 Wire Input Volt Free 1.5mA Pulse Current Input frequency scalable in Analytics
Enclosure type	Polycarbonate
Enclosure rating	IP20
Operating temperature	-20 - +60°
Altitude	1000M
Dimensions	Diameter 115mm, Height 65mm
Weight	0.240Kg
Safety	EN 60730-1:2016
LoRa Wireless Bands	Band 1 - 16 Channels, 865MHz – 870MHz Band 2 - 16 Channels, 915MHz – 925MHz

"The Enscope Air Sense provides valuable context to energy saving devices. Take air conditioning for example. The temperature data from Air Sense, taken at occupant level – not ceiling level – helps to optimise aircon for the real operating environment."

Geoffrey McNeil CEO @ Optiem Energy

Discover the full range



No WiFi connection Required.

With a dependable LoRa network, this device limits the need for unreliable and costly WiFi networking.