

Temperature focused multi-functional, surface-mounted IoT sensor

Overview

Eniscope Air Temp is a wireless temperature and asset condition sensor, offered as part of our Eniscope Air suite of products.

It is battery powered and can be mounted on walls, ceiling or directly onto equipment. The housing is IP rated for use in wet or dusty environments. It features multiple temperature measurement probes and two digital inputs which can monitor doors or pulsed signals.

Application

The Air Temp is perfect for use as part of a larger energy saving system. Data from the temperature sensors can be used to inform scheduling and control of heating and coolings systems whilst the digital inputs can be used to monitor doors, windows and other factors. In situations where chilled or frozen food is stored, such as a walk-in freezer, the Air Temp can be combined with CUES to measure food temperature and air temperature separately – ensuring that energy usage is minimised, whilst keeping within regulated bounds. By monitoring door state and raising alerts in real-time, the most common causes of energy loss can be avoided.

The Specifics

Designed with food temperature monitoring in mind, the Air Temp can operate in most commercial cooking and storage environments. It offers a configurable update rate of between 1 and 60 minutes.

A secure and encrypted RF communication channel is used to report back to a central Eniscope, removing the need for WiFi or additional IoT hubs and their associated charges.

Powered by reliable lithium batteries, it offers up to three years of use. Digital inputs report not only the sensor's state, but can perform pulse counting for metering applications.

Core Functionality



Multiple Temperature Sensing

Digital Switch Reporting

Pulse Counting



Key features

Battery Specification:	Cell size R6-AA Lithium-thionyl chloride Li/SOCl2 Voltage 3.6V Recommended battery szie SAFT 14500
Battery quantity:	2
Battery life:	3 years with a 5-minute update rate.
Temperature probe (where fitted):	Length: 3m Range: -30C to +120C Accuracy: +/- 0.5C (-10C to +85C)
Additional temperature probe:	Available on request, up to 5m lead length.
Digital inputs:	2 independent inputs 2 wire interface Volt free
Pulse characteristics:	20Hz, 50ms width
Enclosure material:	ABS
Enclosure rating	IP31
Operating temperature:	-20C to +60C
Dimensions:	66mm x 151mm x 43mm
Weight:	195g (no batteries or probe)
Safety:	EN62368
LoRa Wireless Bands	Band 1 - 16 Channels, 865MHz – 870MHz Band 2 - 16 Channels,



915MHz - 925MHz

"The data we receive from Air Temp is hugely valuable. Knowing what the temperature is within an asset – like a cold room – isn't just important for energy saving, it can be crucial for food safety."

Troy Wrigley, CEO @ Best.Energy



No WiFi connection Required.

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

