Indoor air quality sensor

LOYUNO-L

Datasheet #89087802









LOYUNO-L represents the pinnacle of indoor air quality monitoring, purposefully designed for effortless integration with BAS/BMS systems. This advanced instrument detects and analyses a wide range of indoor air quality factors, including Ultra-fine, Fine, and Standard Suspended Particulates (PM1, PM2.5, and PM10), Carbon Dioxide (CO₂), Total Volatile Organic Compounds (TVOC), while also monitoring Temperature and Humidity levels.

LOYUNO-L ensures accurate data, serving as a vital component in achieving LEED green or WELL certification for your building. Rigorously tested and certified for its precise sensing capabilities in detecting PM2.5, CO₂, and TVOC, LOYUNO-L meets the stringent standards set by WELL v2.

LOYUNO-L comes equipped with LOYTEC Bluetooth Mesh capabilities, seamlessly integrating with the other Bluetooth Mesh enabled devices. This versatile compatibility makes LOYUNO-L equally well-suited for both new construction projects and retrofitting BAS/BMS systems.

Features

- Multiple IAQ monitors (PM1, PM2.5, PM10, CO₂, TVOC, Temperature, Humidity)
- Supports BACnet MS/TP and Modbus RTU
- · Meets Q1 2022, v2 WELL A08 Requirements
- Bluetooth SIG qualified device, Bluetooth 5.1 with Bluetooth Mesh Profile

- LEDs for optical air quality feedback and status indication
- Easy integration on Bluetooth Mesh enabled LOYTEC devices (e.g. LPAD-7)
- RESET Grade B Accredited Monitor

Specifications	
Туре	LOYUNO-L
Dimensions (mm)	141.91 x 42 x 67.91 (L x W x H), DIM083
Installation	Drywall mount, Electrical box mount, wall mount cradle
Power supply	source 1: 12-24 V DC, 24 V AC source 2: power adapter 12V/1A 6W max. (12 V DC)
Measurement	PM1: 0-1000 μg/m³ ± (5 μg/m³ + 20%) at 0-100 μg/m³;± 10% at 100-1000 μg/m³, PM2.5: 0-1000 μg/m³ ± (5 μg/m³ + 20%) at 0-100 μg/m³;± 10% at 100-1000 μg/m³, PM10: 0-1000 μg/m³ ± (5 μg/m³ + 20%) at 0-100 μg/m³;± 25% at 100-1000 μg/m³, CO_2 : 400-5000 ppm ± (50ppm + 5%), TVOC: 0-30000 ppb ±15% in lab test (Ethanol), Temperature: 0-50°C ±1°C at 25°C and 50% rH, Humidity: 10-80% rH ±10% at 25°C and 50% rH
Sensor Data Update	Periodically 10 seconds (internal refresh rate, no faster than 10 seconds)
Bluetooth protocol conformance	Bluetooth 5.1 Declaration ID: D060851 contains qualified designs: 150092 (controller subsystem), 176697 (host subsystem) and 178269 (mesh profile subsystem)
Bluetooth & RF-charactersitics	Maximum output power: 0 dBm Frequency range: 2402-2480 MHz
Operating conditions	0 °C to 50 °C, 10 – 90 % RH
Interfaces	Modbus RTU / BACnet MS/TP (Select via DIP switch), Bluetooth Mesh
Connection	RS-485, Bluetooth 5.1
For use with	Bluetooth Mesh enabled LOYTEC devices (e.g. LPAD-7)
Order number Product description	
LOYUNO-L UNOli	te Indoor Air Quality Sensor

Dimensions of the devices in mm and [inch]

DIM083 LOYUNO-L



