

Model name:

**AL-431-00-868 EnOcean Multisensor "EnoSense® Wall & Desk"
/ white / IMDA**

Model number: 12790

**Multi-Sensor for installation on desks or walls, 40 x 40 x 13 mm, IMDA / SINGAPORE
Vibration (optional brightness / temperature / humidity / magnet contact)**

Interfaces:

EnOcean, NFC, power supply: integrated solar cell + backup battery CR1632



The **AL-431-00-868 EnOcean Multisensor "EnoSense® Wall & Desk" / white / IMDA** (referenced as **AL-431** in the following) is a flexible self-powered multisensor module capable of measuring temperature, humidity, illumination, magnet contact status and acceleration. It enables the realization of energy harvesting wireless sensors for light, building or industrial control systems communicating using the EnOcean radio standard.

The housing of the **AL-431** has dimension of approx. 40 x 40 x 13 mm, and has been designed to be mounted on top or below a table.

The product integrates the following sensors:

- Vibration / acceleration
- Temperature and humidity
- Illumination
- Magnet contact

Note:

The **AL-431** will be configured in standard configuration as "Vibration detector", EEP: A5-14-05.

Technical data

Interfaces

Type	EnOcean
Quantity	1
Transmit/receive center frequency	868.3 MHz
Frequency range used	868.0 - 868.6 MHz
Maximum transmit power	Typ. +5dBm
Device type	Short range / low power device (SRD/LPD)

User interfaces

Button	Yes, LRN-button
LED	Yes, indicates data transmission

Sensors: rel. humidity

Measuring range	0 - 100 %
Accuracy	± 3 %

Sensors: Temperature

Measuring range	- 20 - +60 °C
Accuracy	± 3 %

Sensor: Acceleration

Measuring range	± 2 g
Sensitivity	0.03 g

Sensors: Brightness

Measuring range	0 - 64,000 lux
Accuracy	± 10 %

Housing / Connection technology

Connectors	-
Housing	-

Supply

Supply voltage	Integrated solar cell
Backup battery	CR1632

Environmental conditions

Operating temperature	-5°..+40°C
Storage temperature	-20°..+70°C
Humidity	0..99% rel. humidity, noncondensing
Protection class	IP20

Dimensions and weight

Weight	19 g
Dimensions	40 x 40 x 13 mm

Table of supported EEP's (EnOcean Equipment Profile)**Transmit/ TX**

Cons. nr.	EEP	Description
1	D2-14-41	Indoor -Temperature, Humidity XYZ Acceleration, Illumination Sensor
2	D2-14-40	Indoor -Temperature, Humidity XYZ Acceleration, Illumination Sensor
3	A5-02-05	Temperature Sensor Range 0°C to +40°C
4	A5-04-01	Range 0°C to +40°C and 0% to 100%
5	A5-04-03	Range -20°C to +60°C 10bit-measurement and 0% to 100%
6	A5-06-02	Range 0lx to 1.020lx
7	A5-06-03	10-bit measurement (1-Lux resolution) with range 0lx to 1000lx
8	A5-14-01	Single Input Contact (Window/Door), Supply voltage monitor (DEFAULT)
9	A5-14-05	Vibration detector (DEFAULT)

Device Label



Ordering Information

Model name	Model number	Model description
AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / white / IMDA	12790	Multi-Sensor EnOcean "EnoSense Wall & Desk", for mounting on walls and desk surfaces; measuring ranges: Temperature -20°..+60° C; Humidity 0..100 % r.h.; Brightness 0..65.000 Lux; Acceleration +/- 2 g; magnetic contact; ambient temp.: -5° ..+45° C / 0 .. 90% r.h.; Dimensions: 40 x 40 x 13 mm; EEP: A5-14-05 (default), D2-14-40, A5-02-05, A5-04- 01, A5-04-03, A5-06-02,A5-06-03,. D5-00-01;D2-14- 41; Power supply: Integrated solar cell, optional: backup battery CR1632, not included EnOcean 868.3 MHz, IMDA SINGAPORE;



Version 02, 14.11.2023