

AL-431-00-902 EnOcean Multisensor (902 MHz)

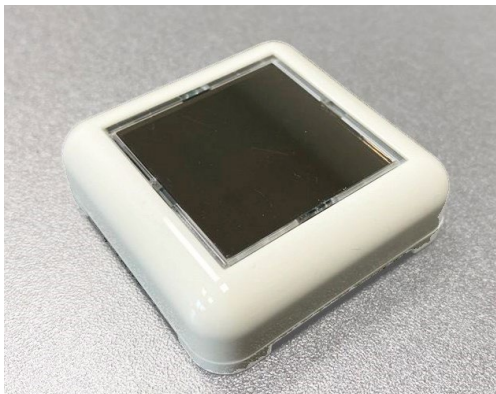
"EnoSense Wall & Desk", 50 x 50 x 13 mm

Multi-Sensor for installation on desks or walls

Vibration / brightness / temperature / humidity / magnet contact

Interfaces:

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



The **EnoSense Wall & Desk** 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 **EnoSense Wall & Desk square** has dimension of approx. 49 x 49 x 13 mm, and has been designed to be mounted on or below a table.

The **EnoSense Wall & Desk square** integrates the following sensors:

- Vibration / acceleration
- Temperature
- Humidity
- Illumination
- Magnet contact

Note: It cannot be guaranteed that the acceleration sensor will be able to detect a person working nearby the sensor when mounted in a desk. This will depend on factors like material and construction of the desk.

Technical data
Interfaces

Type	EnOcean
Number	1
Transmit / Receive frequency	902.875 MHz
Occupied frequency band	902.875 – 902.875 MHz
Maximum transmission power	+99 dB μ V/m

Type	NFC
Number	1

User interfaces

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

Housing / connectors

Connector	-
Housing	PA12, white

Sensors: Rel. humidity

Measuring range	0 – 100 %
Accuracy	\pm 3 %

Sensors: Temperature

Measuring range	- 20 – 60 °C
Accuracy	\pm 0,3 °C

Sensors: Accelerometer

Measuring range	\pm 2 g
Sensitivity	0,03 g

Sensors: Brightness

Measuring range	0 – 65.000 lux
Accuracy	\pm 10 %

Power supply

Supply voltage	Integrated solar cell
Backup battery	CR1632

Dimensions and weight

Weight	29 g
Dimensions	50 x 50 x 17 mm

Environmental conditions

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

Approvals




FCC Rule parts	15.231
Equipment class	Part 15 Security / Remote control

Table of supported EEP's (EnOcean Equipment Profile)

Transmit/ TX

Cons. nr.	EEP	Description
1	D2-14-41 (default)	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

Ordering Information (only different colors)

Article text	Part nr..	Part description
<p>AL-431-00-902 EnOcean Multisensor "EnoSense Wall & Desk" / beige / FCC</p> 	12393	<p>Multi-sensor EnOcean "EnoSense Desk", for installation in table tops; 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: 70 x 12 mm; for drilling diameter 60 mm</p> <p>EEP: D2-14-41 (default), D2-14-40, A5-02-05, A5-04-01, A5-04-03, A5-06-02, A5-06-03, A5-14-05. D5-00-01;</p> <p>Power supply: integrated solar cell, Backup battery: CR1632;</p> <p>EnOcean 902 MHz, FCC, housing: PC, beige (similar to RAL 9010 / pure white);</p>
<p>AL-431-00-902 EnOcean Multisensor "EnoSense Wall & Desk" / black / FCC</p> 	12473	<p>Multi-sensor EnOcean "EnoSense Desk", for installation in table tops; 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: 70 x 12 mm; for drilling diameter 60 mm</p> <p>EEP: D2-14-41 (default), D2-14-40, A5-02-05, A5-04-01, A5-04-03, A5-06-02, A5-06-03, A5-14-05. D5-00-01;</p> <p>Power supply: integrated solar cell, Backup battery: CR1632;</p> <p>EnOcean 902 MHz, FCC, housing: PC, Signal black (RAL 9004);</p>
<p>AL-431-00-902 EnOcean Multisensor "EnoSense Wall & Desk" / white / FCC</p> 	12472	<p>Multi-sensor EnOcean "EnoSense Desk", for installation in table tops; 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: 70 x 12 mm; for drilling diameter 60 mm</p> <p>EEP: D2-14-41 (default), D2-14-40, A5-02-05, A5-04-01, A5-04-03, A5-06-02, A5-06-03, A5-14-05. D5-00-01;</p> <p>Power supply: integrated solar cell, Backup battery: CR1632;</p> <p>EnOcean 902 MHz, FCC, housing: PC, signal white (RAL 9003)</p>

FCC (United States) Regulatory Statement

Contains FCC ID: SZV-STM550U

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.

Version 05, 25.08.2021