

AL-431-00-921 series (TAIWAN)

"EnoSense® Wall & Desk", 50 x 50 x 15 mm

EnOcean Sensor "EnoSense® Wall & Desk"
for vibration detection / desk occupancy
EnOcean 921.7 MHz / TAIWAN

Interfaces:

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



The **AL-431-00-921 series** contains a high sensitive vibration sensor that detects even small movements and sends a message via radio (EnOcean). The sensor electronics, which are built into a plastic housing, is usually attached with a double-sided adhesive pad to a desks surface. Depending on your requirements, the sensor is available in a black, white or beige housing.

Best case, the sensor is supplied with energy by the integrated solar cell in the front.
In situations where the ambient light is not sufficient, an internal battery supplies the sensor energy storage for typically 5 years or longer.

The information is transmitted via the EnOcean wireless standard, **EEP: A5-14-05**.

The following information is currently transmitted:

- Vibration detected, 0..1
- Battery voltage: 8 bit, 0 .. 250 [mV/20]

Technical data

Communication / EnOcean wireless interface

Type	EnOcean
Number	1
Operating frequency	921.7 MHz
Transmission power	0 dBm
Modulation type	FSK
Number of channels	Ch 24 (921,7 MHz)
Transfer / data rate	125 kbit/s

Table 1: Technical data / communication

Sensor: Accelerometer / Vibration

Measuring range	+/- 2g
Sensitivity	0.03 g

Table 2: Technical data / Vibration sensor

User interfaces

Service button	Yes
Service LED	-

Table 3: Technical data / User interfaces

Housing / connection technology

Connection technology	-
Housing	Plastic, PC, white / black / beige

Table 4: Technical data / housing

Power supply

Supply voltage	Integrated solar cell
Backup battery	CR 1632

Table 5: Technical data / power supply

Environmental conditions

Operating temp.	-5°.. 40 °C
Storage temp.	-20 ..+70 °C
Rel. humidity	0..99 % rel. humidity, non condensing
Protection class	IP20

Table 6: Technical data / environmental conditions

Dimensions and weight

Weight	29 g
Dimensions	50 x 50 x 17 mm

Table 7: Technical data / dimensions and weight

Standards and approvals

NCC, AL-431-00-921 beige	 CCXXxxYYyyyZzW Will be updated finally
NCC, AL-431-00-921 white	 CCXXxxYYyyyZzW Will be updated finally
NCC, AL-431-00-921 black	 CCXXxxYYyyyZzW Will be updated finally

Table 8: Technical data / Approval / Label

Ordering Information (only different colors)

Part name	Part nr.	Description
AL-431-00-921 beige	12768	EnOcean sensor "EnoSense Wall & Desk NCC / TAIWAN", for mounting on walls and table surfaces; Measuring range acceleration: +/- 2 g; Ambient temp.: -5° ..+45° C / 0 .. 90% r.h.; Dimensions: 50 x 50 x 15 mm; EEP: A5-14-05; Power supply: Integrated solar cell, backup battery CR1632: EnOcean 921 MHz; Housing: PC, Color: beige (similar to RAL 9010 / pure white);
AL-431-00-921 black	12769	EnOcean sensor "EnoSense Wall & Desk NCC / TAIWAN", for mounting on walls and table surfaces; Measuring range acceleration: +/- 2 g; Ambient temp.: -5° ..+45° C / 0 .. 90% r.h.; Dimensions: 50 x 50 x 15 mm; EEP: A5-14-05; Power supply: Integrated solar cell, backup battery CR1632: EnOcean 921 MHz; Housing: PC, Color: Signal black (RAL 9004);
AL-431-00-921 white	12515	EnOcean sensor "EnoSense Wall & Desk NCC / TAIWAN", for mounting on walls and table surfaces; Measuring range acceleration: +/- 2 g; Ambient temp.: -5° ..+45° C / 0 .. 90% r.h.; Dimensions: 50 x 50 x 15 mm; EEP: A5-14-05; Power supply: Integrated solar cell, backup battery CR1632: EnOcean 921 MHz; Housing: PC, Color: Signal white (RAL 9003)

Version 01, 27.07.2023