

AL-446-00-868 EnOcean sensor "EnoSense® RADON" / CE

Combined Radon / Rn, temperature and rel. humidity sensor
with external power supply (PoE / + 12 V DC)
EnOcean 868 MHz / CE
Article no. 12904 (white)

Interfaces:

Integrated sensors for Radon concentration (pCi/l) / Bq/m³, temperature and rel. humidity
EnOcean (internal antenna), power supply: external power supply (+12 .. +48 V DC), 100 x 86 x 60 mm



Front view



Bottom view

Powered by



The sensor of type **AL-446-00-868 EnoSense® RADON** is used to measure the following values:

- Radon concentration in Bq/m³
- Temperature in °C
- Rel. humidity in %

New measurement data will be available every 10 minutes. Data will be sent via EnOcean wireless interface. The device is supplied by Power Over Ethernet (PoE) or an external 12 V DC power supply.

This device is powered by **Ecosense** technology.

AL-446-00-868 EnoSense® RADON

Product data sheet

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Technical data

Interfaces

Type	EnOcean
Quantity	1
Transmit / receive center frequency	868.3 MHz ASK
Frequency range used	868.0 - 868.6 MHz
Maximum transmission power	+10 dBm

Sensor: Radon (Rn) / powered by Ecosense

Sensor typ	Pulsed Ionization Chamber
Measuring range	7,4.. 3.696 Bq/m ³
Accuracy	+/- 10 % at 370 Bq/m ³
Sensitivity	18 CPH (Counts per hour) per 37 Bq/m ³
Measurement rate	Every 10 minutes
Measurement result	60 minutes moving average

Sensor: Temperature

Measuring range	0 °C .. 60 °C (32 °F .. 140 °F)
Accuracy	± 0,3 °C
Long term drift	Typ. < 0,03 °C/a
Reaction time	Typ. 2 s

Sensor: rel. humidity

Measuring range	0 % - 95 % (non condensing)
Accuracy	± 3 %
Reaction time	Typ. 4 s

User interfaces

Service button	Yes
Service LED	Yes, 1x RGB

Housing, dimensions and weights

Housing	Somos® Ledo 6060 or similar
Weight	270 g
Dimensions	approx. 100 x 86 x 60 mm

Power supply

Power supply	PoE or external power supply, +12 V DC
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Ambient conditions

Ambient temp.	+10° ..+ 50 °C
Storage temp.	-15..+60 °C
Rel. humidity	0. .80 % rel. humidity, non-condensing
Protection class	IP20

Standards / approvals

CE	2014/53/EU RED Directive 2011/65/EU + Annex 2015/863/EU RoHS-3 Directive
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Table of supported EEP (EnOcean Equipment Profile)**Transmit / TX**

No.	EEP	EEP Description	Transmit ID
1	A5-12-00	Automated Meter Reading (AMR) for RADON	BASE-ID
2	A5-04-03	Sensor for temperature and rel. humidity	BASE-ID +1

Receive / RX

No.	EEP	Description
-	-	-

Device description**Energy supply**

The EnoSense® RADON is powered by Power Over Ethernet (PoE) or an external +12 V DC power supply.

EnOcean

The integrated EnOcean transceiver transmits the measured values cyclically to a building management system using unidirectional EnOcean communication.

Mechanics / mounting

The device can be mounted on the wall using the wall bracket supplied. Mounting with an adhesive strip is also possible thanks to the smooth back of the device, but it's not recommended. Sensor should be mounted at a typical height of approx. 1.75 m.

Functions of the EnoSense® RADON / measurement technology

Continuous RADON measurement

The device sends a new measurement value for Radon every 10 minutes. It is ready after a short power on cycle and does not need any user interaction.

The unit of data is Bq/m³.

Continuous temperature and rel. humidity measurement

The device sends new measurement values for temperature and humidity also every 10 minutes. Measurement is ready after power on and does not need any user interaction.

The unit of data is °C for temp. and % for humidity.

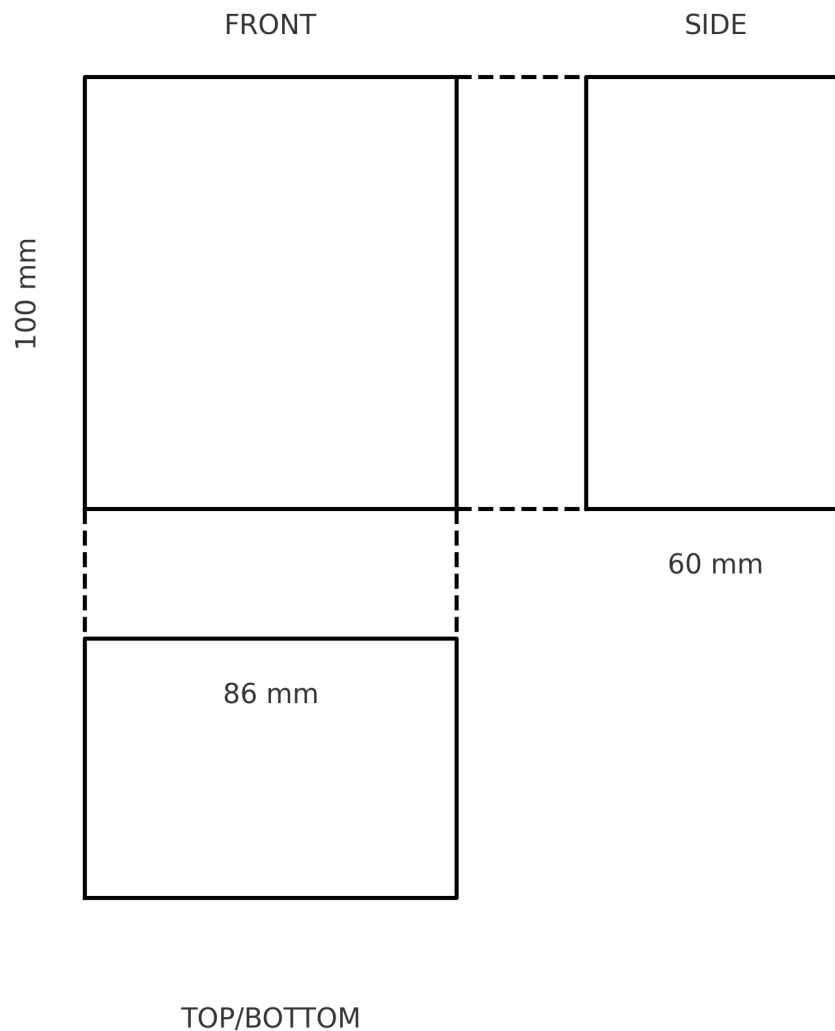
Selecting the device profile / EEP

Actually, the EnoSense® RADON supports the standard Equipment profile (EEP) A5-12-00 for the Radon value and A5-04-03 for temperature and rel. humidity.

Switching sleep mode on / off

Since the device is powered by PoE or an external power supply, the device is not able to send data while in transport.

Dimensions: 100 mm x 86 mm x 60 mm



Ordering information

Article designation	Item no.	Item description
AL-446-00-868 EnOcean sensor "EnoSense® RADON" / white / CE	12904	EnoSense® RADON, sensor for Radon concentration, Bq/m3; temperature and rel. humidity, EnOcean 868.3 MHz / CE, dimensions: 100 x 86 x 60 mm, ambient temp. +10...+50 °C, power supply: PoE or + 12 V DC; With wall-mount bracket; EEP: A5-12-00

Note according to FuAG §20 para. 4:

This device is only approved for operation within the member states of the European Union.

EU Declaration of Conformity

Hereby, DEUTA Controls GmbH declares that the radio equipment type AL-446-00-868 EnoSense® RADON / CE is in compliance with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following Internet address: www.deuta-controls.de in the Service/Downloads section (Doc. EUDC2025_203).

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