



2024

**IoT products and solutions for
Office Spaces and Smart Buildings**



Detect occupancy



Vibration and/or PIR based detection of occupied desks or rooms.

10

Count people

Use our PIR based sensor technology to count people inside a room or an area.

04

20 Measure CO₂

High-precise measurement of CO level inside a room or an area. Combined with a high power LED (see page 24)

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Also the noise level in an area is of interest for you when you try to optimize the work-spaces.

Counting people

Due to several reasons many companies have to implement several measures to take care of the health of their employees. Especially in rooms and areas where people meet each other, the number of people should be limited to a certain amount.

As another result, companies have to use their office area as efficient as possible. So, the question is: Do we have enough meeting rooms? Do they have the right size / capacity? Or do only a few people book too large rooms usually?



To count people inside a room or an area, several kind of sensors can be used. The sensor principle depends on the environment and the use-case.

The most precise sensor to determine the number of people inside an area for sure would be a camera. Combined with an AI software, it would be easy to determine number of people. But normally it will not be allowed to use a camera based system for this task due to GDPR reasons.

Today, there are different technologies available:

- TOF - Time of flight
- PIR - Passive infrared
- Radar
- Light barrier

For this time, we tried to cover the following requirements:

- The device must not use an external power supply to reduce installation cost
- The device should use EnOcean wireless data transmission
- The device should be small enough to be placed easily to the ceiling by an adhesive tape above the door
- The lifetime of the batteries should be typ. >5 years

As a result, we developed the EnoSense People Counter. It is based on PIR technology, and counts people passing by in both directions. It will send immediately an updated counter value when somebody is detected. Due to the optics and the filter algorithm, it is suitable for the most use cases.

Please find the available options on the following pages.

EnoSense® People Counter



Do you need to know how many people are actually inside a room?
 Would you like to check if your meeting rooms have the optimum size, or if you could use the same area for more smaller rooms?
 Or do you have to limit the maximum number of people in a room or area due to any limitation?

In this case, you can use the **EnoSense People Counter**.
 The device does not need any external connection, and can be easily mounted outside of a meeting room above the door. It is supplied by two internal batteries (AA, 1.5 V, lifetime > 5 years) and does not need an external power supply. The People Counter is extremely small (36 x 37 x 80 mm), and will fit in nearly any situation.

Using a GDPR compliant technology (PIR = Passive Infra Red) instead of a camera, it will count people entering or leaving a meeting room. The counter value is transmitted via EnOcean technology.



Ordering information

Part number	Part name
12452	AL-436-00-868 EnOcean sensor "EnoSense People Counter" / black / CE
12465	AL-436-00-868 EnOcean sensor "EnoSense People Counter" / white / CE
12467	AL-436-00-902 EnOcean sensor "EnoSense People Counter" / black / FCC / ISED
12468	AL-436-00-902 EnOcean sensor "EnoSense People Counter" / white / FCC / ISED
12518	AL-436-00-921 EnOcean sensor "EnoSense People Counter" / white / NCC
12537	AL-436-00-921 EnOcean sensor "EnoSense People Counter" / white / KC / KOREA
12538	AL-436-00-868 EnOcean sensor "EnoSense People Counter" / white / CHINA
12539	AL-436-00-928 EnOcean sensor "EnoSense People Counter" / white / MIC
12540	AL-436-00-868 EnOcean sensor "EnoSense People Counter" / white / IDA
12600	AL-436-00-902 EnOcean sensor "EnoSense People Counter" / black / COLOMBIA
12604	AL-436-02-928 EnOcean sensor "EnoSense People Counter" / white / JAPAN
12755	AL-436-00-921 EnOcean sensor "EnoSense People Counter" / black / KC / KOREA
12759	AL-436-02-928 EnOcean sensor "EnoSense People Counter" / black / JAPAN
12763	AL-436-00-902 EnOcean sensor "EnoSense People Counter" / white / COLOMBIA
12770	AL-436-00-921 EnOcean sensor "EnoSense People Counter" / black / NCC / TAIWAN
12772	AL-436-00-921 EnOcean sensor "EnoSense People Counter" / white / NCC / TAIWAN
12791	AL-436-00-868 EnOcean sensor "EnoSense People Counter" / white / IMDA
12799	AL-436-00-868 EnOcean sensor "EnoSense People Counter" / black / IMDA

Interfaces	
Type	EnOcean
Number	1
Transmit / receive center frequency	see data sheet
Frequency range used	see data sheet
Maximum transmission power	see data sheet
Sensor: Motion detection	
Type	PIR (passive infrared)
Measuring range	0.5 m - 2.0 m to head or body
Typ. counting accuracy	95%
User interfaces	
Service button for teach in	Yes, in the front
Service LED	No
Acoustic feedback	No
Housing	
Colors	Black, White
Material	Plastic, PC
Power supply	
External	No
Internal	2x AA batteries, 1.5 V
Environmental conditions	
Operating temperature	+15° .. +40° C
Storage temperature	-20° .. +70° C
Rel. humidity	0 .. 99 %, non condensing
Protection class	IP20
Dimensions and Weight	
Weight	87 g
Dimensions	36 x 37 x 80 mm

The system in a nutshell

EnoDisc®

Our EnoDisc is a bi-directional EnOcean transceiver that covers a range of typ. 700 - 1.000 sqm. Supplied by PoE (Power over Ethernet), it does not need an extra power supply. Communication is standardized via Ethernet connection, using the EnOcean serial protocol 3.

Sensors

Select the sensors you need: motion, temperature, CO2, brightness, noise etc..

You will find for sure the right in our portfolio. Or simply select another brand once we can not deliver what you need.

NEW



Cloud or BMS connection

You can connect the second Ethernet port of the VL-700 BASE to the local network or to a wireless router. Depending on your needs, we can configure the interface to work together with more or less any available cloud service like AWS or Microsoft Azure. As the standard, we use MQTT format to exchange data.



VL-700 BASE

The VL-700 BASE collects all data received by up to 32 EnoDiscs send by up to 500 sensors. Setting up only the EnOcean ID (EURID) and the type of the sensor (EEP = EnOcean Equipment Profile), data will be interpreted and forwarded to the BMS or Cloud as needed. If you need more EnoDisc or sensors, you can scale as you want.

Detect occupancy



EnoSense® PIR Ceiling

A sensor to detect people inside a room. To be mounted under the ceiling or on a wall.

In this way, you can check if there is at least one person in a room.



Do you need to know if a desk or a room is occupied or not?

As usual, there is more than one solution for this. In case of desk occupancy detection, it mainly depends on the environment which sensor you should prefer:

EnoSense® Desk or **EnoSense® Wall & Desk**.

In case of a meeting room, where you only would like to know that at least one person is inside, you should use the **EnoSense® PIR Ceiling**.



EnoSense® Desk

This new device will be mounted to the front edge of the table.

It uses a high sensitive under desk PIR sensor, combined with a high sensitive vibration sensor. In this way, you can cover situations where vibration of the desk is not a good indicator for presence detection.

It is powered only by a solar cell, and does not need a battery.



EnoSense® Wall & Desk

Besides temperature, brightness and humidity, this multi-sensor can detect vibration.

Mounted to a desk with an adhesive tape, this high sensitive device will detect the presence of somebody working at the desk with a good coverage.

NEW

EnoSense® Desk

If you would like to check if a working place is occupied or not, the EnoSense® Desk is a perfect solution.

It has an under desk passive infrared sensor (PIR), with a plastic that shields the area at the right side of the sensor from detection. It is simply mounted on the front edge of the table, on the right side of a desk.

In addition, it has a high sensitive vibration sensor inside, to support the detection of people while working on a PC.

It is powered by a standard coin cell CR2032 with a lifetime of at least 5 years.

You can select by pressing the service button how the sensor works:

Mode 1: Motion detection only by PIR sensor

Mode 2: Motion detection only by Vibration sensor

Mode 3 (default):

Combined detection, logical "OR" of Vibration and PIR sensor.

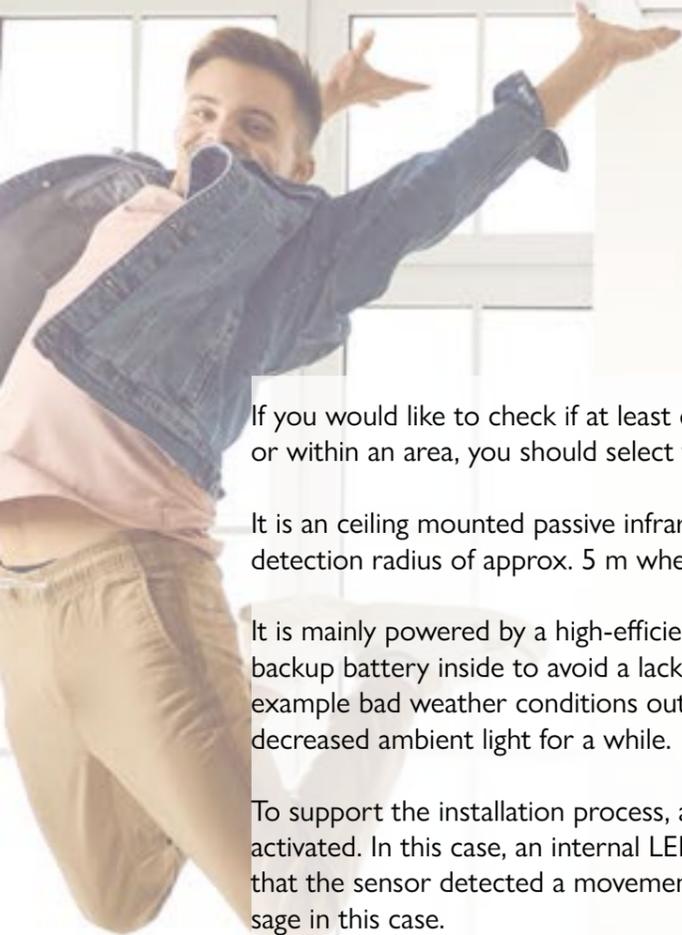


Interfaces	
Type	EnOcean
Number	1
Transmit / receive center frequency	868.3 / 902.875 MHz
Sensors: Motion detection	
Type 1	PIR (passive infrared)
Measuring range	0.1 m - 2.0 m
Type 2	Vibration
User interfaces	
Service button for teach in	Yes, in the front
Service LED	Yes
Acoustic feedback	No
Housing	
Colors	White
Material	Plastic, PC
Power supply	
External	No
Internal	Battery CR2032 (included)
Environmental conditions	
Operating temperature	0 °C .. +60 °C
Storage temperature	-20 °C .. +70 °C
Rel. humidity	0 .. 99 %, non condensing
Protection class	IP20
Dimensions and Weight	
Weight	19 g
Dimensions	81 x 41 x 9 (26) mm
Available options	
CE / RED	Yes
FCC	Yes (15.231 / Part 15)

Ordering information

Part number	Part name
12588	AL-437-03-868 EnoSense Desk / white / CE (868.3 MHz)
12623	AL-437-03-902 EnoSense Desk / white / FCC (902 MHz)

EnoSense® PIR Ceiling



If you would like to check if at least one person is inside a room or within an area, you should select the EnoSense PIR Ceiling.

It is an ceiling mounted passive infrared sensor (PIR), and has a detection radius of approx. 5 m when mounted at 2.5 m height.

It is mainly powered by a high-efficient solar cell, and has a backup battery inside to avoid a lack of energy in case of for example bad weather conditions outside that will lead to a decreased ambient light for a while.

To support the installation process, a so called walk test can be activated. In this case, an internal LED will light up and show that the sensor detected a movement and would send a message in this case.

Ordering information

Part number	Part name
12321	AL-432-00-868 EnoSense PIR Ceiling / white / CE
12394	AL-432-00-902 EnoSense PIR Ceiling / white / FCC
12517	AL-432-00-921 EnOcean motion sensor "EnoSense PIR Ceiling" / white / NCC / TAIWAN
12533	AL-432-00-921 EnOcean motion sensor "EnoSense PIR Ceiling" / white / KC
12534	AL-432-00-868 EnOcean motion sensor "EnoSense PIR Ceiling" / white / CHINA
12535	AL-432-00-928 EnOcean motion sensor "EnoSense PIR Ceiling" / white / MIC
12536	AL-432-00-868 EnOcean motion sensor "EnoSense PIR Ceiling" / white / IDA
12602	AL-432-02-902 EnOcean motion sensor "EnoSense PIR Ceiling" / white / COLOMBIA
12607	AL-432-02-928 EnOcean motion sensor "EnoSense PIR Ceiling" / white / JAPAN
12795	AL-432-00-868 EnOcean motion sensor "EnoSense PIR Ceiling" / white / IMDA

Interfaces		Power supply	
Type	EnOcean	External	No
Number	1	Internal	Solar cell, backup battery (CR2032)
Sensors: Motion detection		Environmental conditions	
Type 1	PIR (passive infrared)	Operating temperature	0° .. +30° C / 32° .. 85° F (indoor only)
Mounting height (recommended)	2.5 - 3.0 m	Storage temperature	-20° .. +70° C // 32° .. 185° F
User interfaces		Rel. humidity	20 .. 85 %, r.h., non condensing
Service button for teach in	Yes, in the front	Protection class	IP20
Service LED	Yes, behind the dome	Dimensions and Weight	
Acoustic feedback	No	Weight	87 g
Housing		Dimensions	68 x 25 x 7 (25) mm
Colors	White		
Material	Plastic, PC		

EnoSense® Wall + Desk



If you would like to check if somebody is working on a desk, and you can rely on a vibration due to the desk construction and the typical movements based on the job, you should select the **EnoSense® Wall + Desk**.

It is a desk occupancy sensor with a high sensitivity vibration and acceleration sensor. It is mounted with an adhesive tape (included) to the top surface of a desk. Compared with the **EnoSense® Desk**, it has only a vibration sensor.

The integrated solar cell of the sensor is supported by an internal backup battery.



Ordering information

Part number	Part name
12286	AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / white / CE
12471	AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / black / CE
12472	AL-431-00-902 EnOcean Multisensor "EnoSense Wall & Desk" / white / FCC
12473	AL-431-00-902 EnOcean Multisensor "EnoSense Wall & Desk" / black / FCC
12515	AL-431-00-921 EnoSense Wall & Desk / NCC / TAIWAN white
12522	AL-431-00-928 EnOcean Multisensor "EnoSense Wall & Desk" / white / MIC
12523	AL-431-00-921 EnOcean Multisensor "EnoSense Wall & Desk" / white / KC
12524	AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / white / CHINA
12525	AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / white / IDA
12635	AL-431-02-928 EnOcean Multisensor "EnoSense Wall & Desk" / black / JAPAN
12636	AL-431-02-928 EnOcean Multisensor "EnoSense Wall & Desk" / white / JAPAN
12643	AL-431-01-902 EnOcean Multisensor "EnoSense Wall & Desk" / white / COLOMBIA
12762	AL-431-01-902 EnOcean Multisensor "EnoSense Wall & Desk" / black / COLOMBIA
12769	AL-431-00-921 black
12778	AL-431-00-921 EnOcean Multisensor "EnoSense Wall & Desk" / black / KC
12790	AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / white / IMDA
12798	AL-431-00-868 EnOcean Multisensor "EnoSense Wall & Desk" / black / IMDA

Interfaces	
Type	EnOcean
Number	1
Transmit / receive center frequency	see data sheet
Sensors: Motion detection	
Type	Vibration / acceleration
Range / sensitivity	+/- 2 g / 0.003 g
Type	Temperature, humidity, ambient light, not activated by default
User interfaces	
Service button for teach in	Yes, at the side
Service LED	Yes, on top
Acoustic feedback	No
Housing	
Colors	Black, White, Beige
Material	Plastic, PC
Power supply	
External	No
Internal	Solar cell, backup battery (CR1632)
Environmental conditions	
Operating temperature	-5° .. +40° C / 23° .. 104° F
Storage temperature	-20° .. +70° C / -4° .. 158° F
Rel. humidity	0 .. 99 %, non condensing
Protection class	IP20
Dimensions and Weight	
Weight	29 g
Dimensions	50 x 50 x 17 mm

Check environment



EnoPuck® CO2 / with RGB LED

You can simply put it on a desk, and plug the external power supply into a power outlet. Done.

The EnoPuck® CO2 measures the CO2 concentration of the ambient air. If you do not change the configuration, the internal LED'S will light in green, yellow and red depending on the measured value. In addition, it measures also temperature, rel. humidity and ambient light, and transmits data via EnOcean Wireless interface.

Quite often our customers need to check the CO2 concentration in an office or in a meeting room to take care of the air quality. In addition, for example in a classroom of a school, also a local LED should signal the CO2 concentration with different colors (green / yellow / orange / red).

We can provide you pure solar powered sensors for CO2 and NOISE measurement (**EnoSense CO2** and **EnoSense NOISE**).

In addition, we have the **EnoPuck®** series multi-sensor devices with high brightness RGB-LEDs inside (therefore an external power supply is needed).



EnoPuck® CO2 WALL

Same features as the EnoPuck® CO2, but the EnoPuck CO2 WALL is prepared to be connected to an in-wall power supply (+12 V DC). Therefore, the power cable is on the backside of the device, and no power connector is visible from the outside.

You should select this device if you do not like the external power supply and the power cord on the wall.

Two devices with identical housing:

The **EnoSense® NOISE** measures the sound pressure level in dB SPL, and the **EnoSense® CO2** the CO2 concentration in ppm.

Both devices are powered by the full-size solar cell in the front. There are no batteries inside.

With the included mounting bracket or an adhesive tape it can be easily installed in any room to any wall.



EnoSense® NOISE



EnoSense® CO2



EnoSense® Temp/RH

This small sensor measures temperature and rel. humidity. It provides high accurate values (temp.: ± 0.3 °C, hum.: ± 3 %). The sensor in the stylish design housing can be easily mounted anywhere with the enclosed adhesive pad.

EnoSense® CO2



If you would like to measure the CO2 concentration of the ambient air, and you do not need a local visual feedback as you have in case of the **EnoPuck® CO2**, you should select the **EnoSense® CO2**.

It measures the CO2 concentration, temperature and rel. humidity, and transmits these values together with the actual energy level via EnOcean telegrams.

At a typical ambient light level, it will send new values all 300 seconds.

The full-size solar cell provides all the energy to the EnoSense CO2, without the need for an internal battery.



Ordering information

Part number	Part name
12590	AL-439-00-868 EnoSense CO2 / white / CE
12619	AL-439-00-868 EnoSense CO2 / black / CE
12639	AL-439-00-902 EnoSense CO2 / white / FCC
12640	AL-439-00-902 EnoSense CO2 / black / FCC

Interfaces

Type	EnOcean
Number	1

Sensors:

Type	CO2
Range	0 .. 5.000 ppm
Accuracy typ.@25° C	+/- (30 ppm +3 % rdg)
Measurement & tx interval	300 s

User interfaces

Service button for teach in	Yes, back side
Service LED	Yes, inside
Acoustic feedback	No

Housing

Colors	White, Black
Material	Plastic, PC

Power supply

External	No
Internal	Solar cell, no batteries

Environmental conditions

Operating temperature	0° .. +50° C / 32° .. 122° F (indoor only)
Storage temperature	-15° .. +60° C / 5° .. 145° F
Rel. humidity	0 .. 99 %, r.h., non condens-ing
Protection class	IP20

Dimensions and Weight

Weight	120 g
Dimensions	67 x 116 x 23 mm

Available options

CE / RED	Yes
FCC	Yes (15.231 / Part 15)

EnoSense® NOISE



If you would like to measure the noise level of the environment, you should select the **EnoSense® NOISE**.

It measures the noise level in dBSPL and transmits the value together with the actual energy level via EnOcean telegrams.

At a typical ambient light level, it will send new values all 240 seconds.

The full-size solar cell provides all the energy to the **EnoSense® NOISE**, without the need for an internal battery.



Ordering information

Part number	Part name
12620	AL-440-00-868 EnoSense NOISE / white / CE
12621	AL-440-00-868 EnoSense NOISE / black / CE
12637	AL-440-00-902 EnoSense NOISE / white / FCC
12638	AL-440-00-902 EnoSense NOISE / black / FCC

Interfaces

Type	EnOcean
Number	1

Sensors:

Type	Noise level sensor
Range	35.. 80 dBSPL
Tx interval	240 s

User interfaces

Service button for teach in	Yes, back side
Service LED	Yes, inside
Acoustic feedback	No

Housing

Colors	White, Black
Material	Plastic, PC

Power supply

External	No
Internal	Solar cell, 2x AAA batteries

Environmental conditions

Operating temperature	0° .. +50° C / 32° .. 122° F (indoor only)
Storage temperature	-15° .. +60° C / 5° .. 145° F
Rel. humidity	0 .. 99 %, r.h., non condensing
Protection class	IP20

Dimensions and Weight

Weight	120 g
Dimensions	67 x 116 x 23 mm

Available options

CE / RED	Yes
FCC	Yes (15.231 / Part 15)

EnoPuck® CO2



If you would like to measure the CO2 concentration of the ambient air, and you need a local visual feedback to tell people inside a room immediately that's time to open the window, then the **EnoPuck® CO2** is the right choice.

A state-of-the-art CO2 sensor (NDIR) measures the CO2 concentration of the air. With the standard configuration, the internal high-power RGB LED will change the color according to the measured level from green to yellow and red. Due to the fact that the LED can illuminate the EnoPuck CO2 the whole time, an external power supply (+12 V DC) is necessary (included).

At the same time, you can transmit the CO2 value and measured temperature, humidity and the ambient light level via EnOcean wireless interface. Also a PIR motion detector and a vibration sensor is integrated. This can be used locally to disable the LEDs when nobody is present, for example.

One main feature is also that you can configure the whole device, for example the threshold values, the transmit intervals and the LEDs colors and brightness via the free-of-charge software tool BL-PC-FLEX-2 and an EnOcean USB-Stick.



Interfaces		Power supply	
Type	EnOcean	External	Yes, +12 V DC power supply
Number	1	Internal	No
Transmit / receive center frequency	see data sheet		
Sensors:		Environmental conditions	
Type	CO2	Operating temperature	0° .. +50° C / 32° .. 122° F (indoor only)
Range	0 .. 2.550 ppm	Storage temperature	-20° .. +70° C // 32° .. 185° F
Accuracy typ. @25° C	+/- (30 ppm +3 % rdg)	Rel. humidity	0 .. 99 %, r.h., non condens-ing
Type	rel. humidity	Protection class	IP20
Accuracy	+/- 2 %		
Type	Temperature	Dimensions and Weight	
Accuracy	+/- 1° C	Weight	150 g
Type	Motion / PIR	Dimensions	100 x 28 mm
Detection range	3 - 5 m		
User interfaces		Housing	
Service button for teach in	Yes, at the side	Colors	White, opaque
Service LED	No	Material	Plastic, PC
Acoustic feedback	Yes		

Ordering information		
Part number	Part name	
12301	AL-602-01-868 EnoPuck CO2 / CE	
12562	AL-602-01-902 EnoPuck CO2 / FCC	
12776	AL-602-01-921 EnoPuck CO2 / NCC / TAIWAN	
12782	AL-602-01-921 EnoPuck CO2 / KC/ KOREA	
12792	AL-602-01-868 EnoPuck CO2 / IMDA	



If you would like to measure the CO2 concentration of the ambient air, and you need a local visual feedback to tell people inside a room immediately that's time to open the window, also the **EnoPuck® CO2 WALL** is the right choice.

Compared with the EnoPuck CO2, the **EnoPuck® CO2 WALL** has exactly the same technical features. The only difference is that it is supplied by an in-wall mounted power supply (12 V DC), so the external power supply and also no power cord is visible on the wall.

This is quite useful if you do already have a power outlet available, or you simply do not like to have the power cord on the wall.



Ordering information

Part number	Part name
12433	AL-602-04-868 EnoPuck CO2 WALL / CE
12564	AL-602-04-902 EnoPuck CO2 WALL / FCC
12670	AL-602-01-868 EnoPuck CO2 WALL / CHINA
12672	AL-602-04-921 EnoPuck CO2 WALL / NCC / TAIWAN
12676	AL-602-01-928 EnoPuck CO2 WALL / JAPAN
12783	AL-602-04-921 EnoPuck CO2 WALL / KC / KOREA



The **EnoSense® Temp/RH** offers a simple way of measuring temperature and relative humidity and transmitting the values wirelessly in accordance with the EnOcean radio standard.

It is powered by an internal CR2032 battery. The lifetime is at least 5 years until the battery has to be replaced.

It can be mounted either using the enclosed double-sided adhesive pad or by screwing it to the wall.



Ordering information

Part number	Part name
12391	AL-435-00-868 EnoSense Temp/RH white / CE
12829	AL-435-00-902 EnoSense Temp/RH white / FCC

The actually smartest available interface between a PLC with Ethernet interface and maybe several hundreds of EnOcean wireless sensors and actuators is the new and innovative EnoDisc. To provide the easiest way of installation, the EnoDisc communicates via Ethernet, and is powered by Power over Ethernet PoE / 48 V DC, using the same Ethernet cable.

The EnoDisc uses the EnOcean Serial Protocol 3 (ESP3) to receive and transmit data from/to the Ethernet.

The EnoDisc comes in an on-wall housing with a modern design, and can be easily mounted to the ceiling. The electrical connection is done using a standard LSA tool for Ethernet cables.

An integrated web server allows to track EnOcean communication in real time.

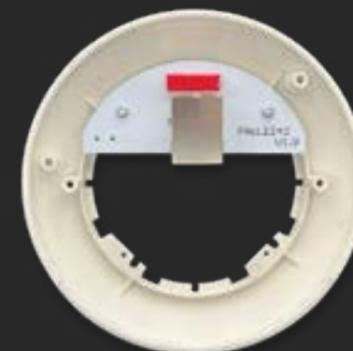


Interfaces	
Type 1	EnOcean, bi-directional
Type 2	Ethernet (PoE)
User interfaces	
Service button	No
Service LED	Yes, inside
Acoustic feedback	No
Housing	
Colors	White, Black
Material	Plastic, PC
Connectors	
Ethernet	RJ45

Power supply	
External	Power over Ethernet (PoE)
Environmental conditions	
Operating temperature	0° .. +45° C / 32° .. 113° F (indoor only)
Storage temperature	-20° .. +70° C / -4° .. 158° F
Rel. humidity	0 .. 99 %, r.h., non condensing
Protection class	IP20
Dimensions and Weight	
Weight	95 g
Dimensions	110 x 38 mm

Ordering information

Part number	Part name
12320	AL-512-01-868 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / CE
12435	AL-512-01-868 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / black / CE
12404	AL-512-01-902 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / FCC
12561	AL-512-00-902 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / black / FCC
12516	AL-512-01-921 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / NCC / TAIWAN
12773	AL-512-01-921 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / black / NCC / TAIWAN
12526	AL-512-00-921 EnoDisc KOREA
12541	AL-512-01-868 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / CHINA
12543	AL-512-01-868 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / IDA
12767	AL-512-02-928 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / JAPAN
12605	AL-512-02-928 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc /black/ JAPAN
12765	AL-512-00-902 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / white / COLOMBIA
12766	AL-512-00-902 IP-ENOCEAN-BRIDGE POE / RJ45 / EnoDisc / black / COLOMBIA



Connector: RJ45



Transceiver + electronics

VL-700 BASE

The VL-700 BASE is a LINUX based edge controller. With the pre-installed driver software DBA (DEUTA Building Automation) and our ECS application (EnoDisc Controls System), it supports directly up to **32 EnoDisc's** and **up to 500 EnOcean sensors**.

With the 2 Ethernet ports, you can connect the VL-700 BASE to the local intranet and the cloud with all state-of-the-art security standards you need in between.

In addition, you can use the combined RS232/RS422/RS485 serial interface port to connect for example a wired sensor via Modbus/RTU.

In the standard configuration, the ECS can be easily setup using an easy to use user interface. After a few steps, you can directly access all sensor data via your cloud solution.

If you need more features in your project, we can adapt the application and add for example interfaces like KNX-TP, BACnet, Modbus/TCP, Modbus/RTU or SIEMENS S7.



System resources

CPU	EnOcean
Operating system	Linux RT
RAM	512 MB
FLASH	4 GB
Real clock	Yes
Backup battery	Yes
Buzzer	Yes

Interfaces

Ethernet	2x 10/100 MBit (ETH0 / ETH1)
USB	1x Host 2.0 (max. 500 mA)
Serial	Combined RS-323/RS-422/RS-485
SD card	Yes
Others	Via extension port, i.e. KNX-TP

Power supply

Supply voltage	24 V DC (10 - 32 V DC)
Supply current	0.6 A @ 24 V DC

Environmental conditions

Operating temperature	-20° .. +60° C / -4° .. 140° F
Storage temperature	-20° .. +70° C / -4° .. 158° F
Rel. humidity	5 .. 85 %, non condensing
Protection class	IP20v

Dimensions and weight

Weight	1.0 kg
Dimensions	134 x 102 x 45 mm

Approvals / standards

CE	Yes
UL	ULus: UL61010-1 / UL61010-2-201 cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex nA IIC T5 Gc
DNV-GL	Yes

Ordering information

Part number	Part name
11895	VL-700 BASE, edge controller with EnoDisc Control System (pre-installed)



EnoDisc® Control System

The ECS is a pre-installed application, running on the VL-700 BASE (or any other control panel or edge controller from DEUTA Controls).

It is easy to use, and it provides a simple but powerful user interface to setup and maintain your project.

To add a sensor to the system, you only have to edit a friendly name, enter the EURID (unique EnOcean ID), and enter the EEP (EnOcean Equipment Profile = which kind of sensor you want to add).

When you already have added at least one EnoDisc in the system, by simply entering IP and friendly name, the system is basically ready to transmit EnOcean sensor data towards your cloud.

To edit the clouds interface configuration, there are similar simple dialogs where you can setup the correct values and parameters.

