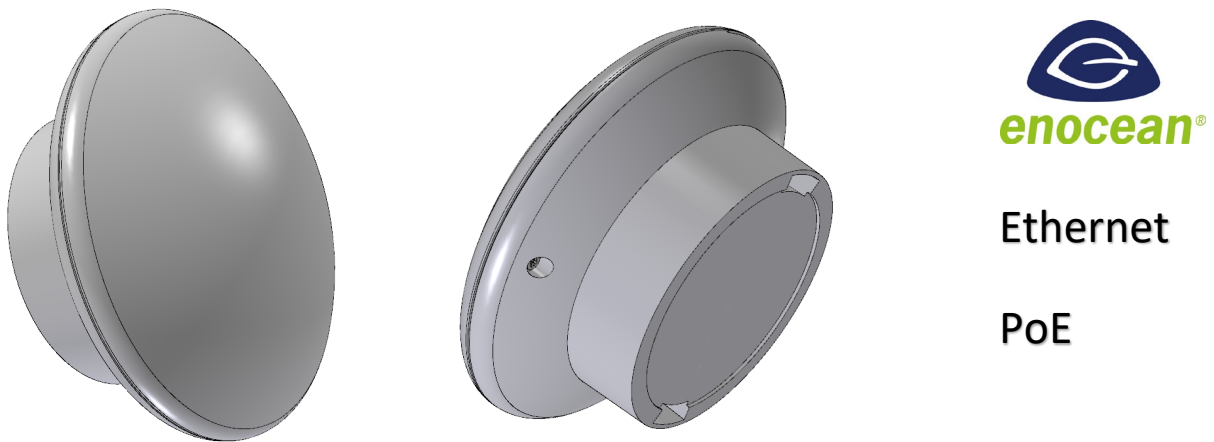

AL-512-00-868 IP-ENOCHEAN-BRIDGE PoE V1 / EnoDisc

Bi-directional bridge between Ethernet-IP and EnOcean, Power Over Ethernet

Part nr. 12184

Interfaces:

1x Ethernet on LSA 8-pol., 1x EnOcean bi-directional (internal antenna), power supply: Power Over Ethernet



The IP-EnOcean-Bridge **AL-512-00 IP-ENOCHEAN-BRIDGE POE V1 / EnoDisc** provides an Ethernet interface and an EnOcean transceiver, to receive EnOcean sensor data via 868,3 MHz, and to transmit actuators and configuration data via the wireless EnOcean interface.

The **EnoDisc** works completely transparent using the well specified EnOcean Serial Protocol 3 (ESP3). Besides the IP address and the subnet mask, no configuration is needed to integrate and use the **EnoDisc**. Received data will not be interpreted in any way by the **EnoDisc**.

The on-wall housing of the **EnoDisc** consists of three parts, and allows an optimized installation procedure (adapter for roof mounting, lower part for LSA connection, upper part with electronics).

Technical data

Interfaces

Type	Ethernet, 10/100 Mbit
Number	1
Galvanic isolation	No

Type	EnOcean
Number	1
Transmit / Receive frequency	868.3 MHz / ASK
Occupied frequency band	868.0 – 868.6 MHz
Maximum transmission power	Typ. 6 dBm @ 868.300 MHz
EN 300200 receiver category	2

User interfaces

Service button	No
Service LED	1x, green, inside

Housing / connectors

Connection technology	LSA IDC-connector for 4x2 CAT cable
Gehäuse	ABS (UL94 HB), grey white RAL 9002

Power supply

Supply voltage	48 V DC
Power consumption	typ. 0.7 W, max. 1.0 W

Environmental conditions

Operating temp.	0°..45°C
Storage temp.	-20°..+70°C
Humidity	10..95% rel. Humidity, non- condensing
Protection class	IP20

Dimensions and weight

Weight	95g
Dimensions	Diameter 110 mm Height 38 mm

Standards / approvals

CE	2014/53/EU RED directive 2011/65/EU RoHS directive
Approvals / tests	EN 62368-1:2014 + AC:2015 ETSI EG 203 367 DIN/EN 55032 EN/IEC 61000-4-2 EN/IEC 61000-4-3 EN/IEC 61000-4-4 EN/IEC 61000-4-5 EN/IEC 61000-4-6

Factory settings

IP	192.168.1.50
Subnet mask	255.255.255.0
Gateway	192.168.1.1
Port	8424

Table of supported EEP (EnOcean Equipment Profile)

Received data

Ref. nr.	EEP	Description
-	n.a.	-

The AL-512-00 IP-ENOCHEAN-BRIDGE PoE V1 / EnoDisc does not interpret any EnOcean data received from an EnOcean sensor, but sends them as they are via Ethernet in ESP3 format (EnOcean Serial Protocol) to a control unit. The interpretation of data according to an EEP is done by this control unit, for example a VL-700 BASE 1.

Short description

Supply voltage

The **EnoDisc** is supplied by an Ethernet-Switch with **PoE-Ports** or a **PoE-Injector** via the Ethernet cable.

Ethernet

The **EnoDisc** communicates by Ethernet with a PLC (Programmable Logic Controller). Any communication (receive and transmit) with the **EnoDisc** is based on data exchange in **ESP3** format (EnOcean Serial Protocol 3).

The connection to the **EnoDisc** has to use port 8424.

The default IP address is 192.168.1.50, subnet mask is the 255.255.255.0.

Electrical connections and mounting

The adapter of the housing has to be fixed to the wall or the ceiling (housing part 1) by screws.

In the next step, the housing part with the LSA connector has to be mounted (housing part 2), and the electrical connection can be done using a standard LSA tool.

Finally, the electronic module can be connected to the base with a flat ribbon cable and the small connector (housing part 3).

The housing can now be closed by rotating the two parts clockwise against each other.



EnOcean, bidirectional

The integrated EnOcean transceiver allows the bidirectional communication with EnOcean sensors and actuators.

Service LED

When the upper shell of the device is opened, the integrated green LED shows the status of the **EnoDisc**:

- LED off = power supply is off, no PoE present
- LED steady on = power supply is o.k., Ethernet link is active
- LED flashing all 10 seconds = Receiving data from TCP connection
- LED flashing = Receiving or transmitting EnOcean data from/to TCP

Configuration

The IP address and the subnet mask can be easily changed via the integrated MODBUS TCP.

As a second option, the configuration of the **EnoDisc** can be changed using a configuration cable and the PC-Tool "DC-Config" via USB.

Functions of the EnoDisc

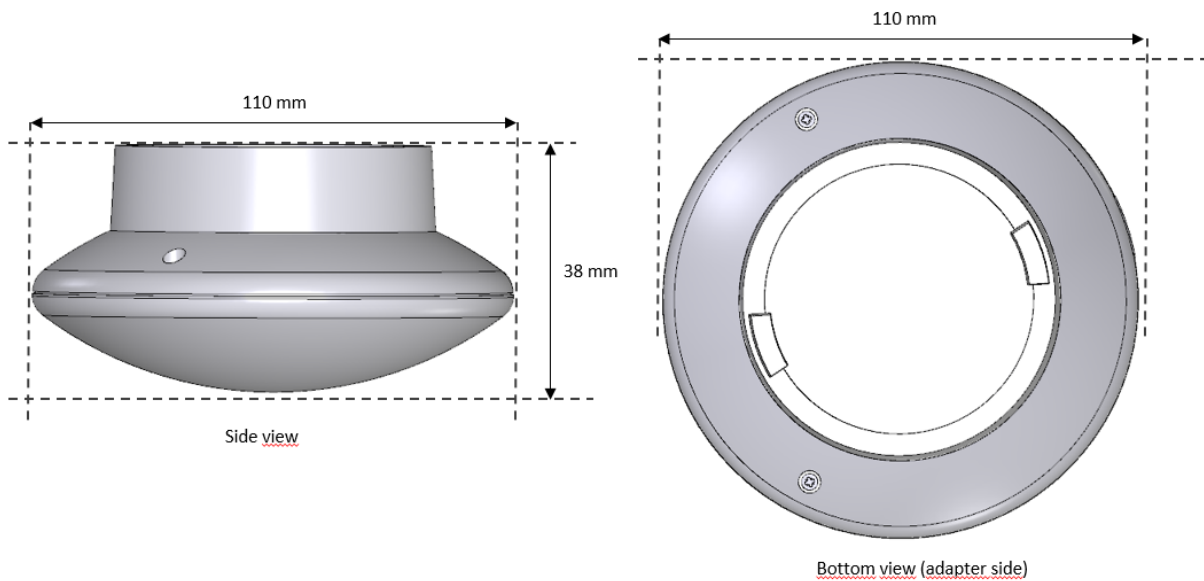
Receive EnOcean telegrams

As long as a TCP connection is active using port 8424, the **EnoDisc** is ready to receive EnOcean telegrams in ESP3 format.

Transmission of EnOcean telegrams

The **EnoDisc** will transmit data received from the Ethernet connection in ESP3 format by the EnOcean transceiver.

Dimensions:



Ordering information

Article text	Part nr.	Description
AL-512-00-868 IP-ENOCHEAN-BRIDGE POE V1 / EnoDisc	12184	Bidirectional bridge between EnOcean and Ethernet TCP; power supply by PoE; communication via ESP3 (EnOcean Serial Protocol 3); on-wall housing, three part; weight: 95 g, operating temp.: 0°C - 45°C storage temp.: -20°C - 70°C, humidity: 5 - 90% RH, non-condensing;
DC Config Cable V1	12203	Configuration cable for AL-512-00 IP-ENOCHEAN-BRIDGE PoE V1 PoE / EnoDisc

EU Declaration of Conformity

Hereby the DEUTA Controls GmbH declares that the radio equipment type **AL-512-00-868 IP-ETHERNET-BRIDGE PoE V1** is compliant with the directive 2014/53/EU. You can download the complete EU Declaration of Conformity as a pdf-document on our homepage www.deuta-controls.de in the area Service/Downloads (Dok. EUDC2020_162).

Version 20, 26.05.2020