

AL-512-01-868 EnoDisc®

Product datasheet

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AL-512-01-868 IP-ENOCHEAN-BRIDGE PoE / RJ45 / EnoDisc®

Bidirectional bridge between Ethernet-IP and EnOcean, Power Over Ethernet (PoE)

Part.-Nr. 12320 (white) / 12435 (black)

Interfaces:

1x Ethernet RJ45, 1x EnOcean bi-directional (internal antenna), power supply: Power Over Ethernet



The IP-EnOcean-Bridge **AL-512-01-868 IP-ENOCHEAN-BRIDGE / RJ45 / 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®.

When delivered with factory defaults, the IP configuration will be received via DHCP server. The on-wall housing of the EnoDisc® consists of three parts, and allows an optimized installation procedure (adapter for roof mounting, lower part for RJ45 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	RJ45
Housing	ABS (UL94 HB), grey white RAL 9002

Power supply

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

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 + addendum 2015/863/EU RoHS-3 directive
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Factory settings

IP	Via DHCP
Port	8424

Table of supported EEP (EnOcean Equipment Profile)

Received data

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

The AL-512-01-868 IP-ENOCHEAN-BRIDGE / RJ45 / 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 RJ45 connector has to be mounted (housing part 2), and the electrical connection can be done using a standard patch cable.

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 Web server or MODBUS TCP.

Functions of the EnoDisc®

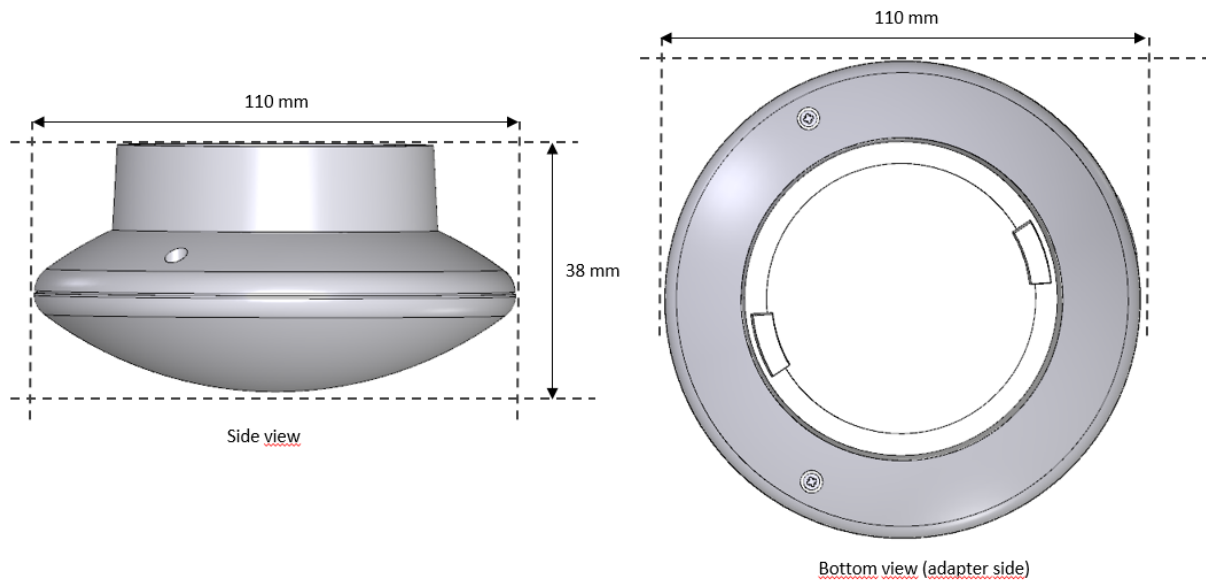
Receive EnOcean telegrams

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-512-01-868 IP-ENOCHEAN-BRIDGE POE / RJ45 / EnoDisc® / white / CE	12320	Bidirectional bridge between EnOcean and Ethernet TCP; power supply by PoE; communication via ESP3 (EnOcean Serial Protocol 3); on-wall housing, threepart; weight: 95 g, operating temp.: 0°C - 45°C storage temp.: -20°C - 70°C, humidity: 5 - 90% RH, non-condensing; white; CE
AL-512-01-868 IP-ENOCHEAN-BRIDGE POE / RJ45 / EnoDisc® / black / CE	12435	Bidirectional bridge between EnOcean and Ethernet TCP; power supply by PoE; communication via ESP3 (EnOcean Serial Protocol 3); on-wall housing, threepart; weight: 95 g, operating temp.: 0°C - 45°C storage temp.: -20°C - 70°C, humidity: 5 - 90% RH, non-condensing; black; CE

Hinweis gemäß FuAG §20 Abs. 4:

Dieses Gerät ist nur für den Betrieb innerhalb der Mitgliedsstaaten der Europäischen Union zugelassen.

EU Konformitätserklärung

Hiermit erklärt die DEUTA Controls GmbH, dass der Funkanlagentyp **AL-512-01-868 IP-ENOCEAN-BRIDGE PoE / RJ45 / EnoDisc®** der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: www.deuta-controls.de im Bereich Service/Downloads (Dok. EUDC2020_171).

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