

## AL-512-01-868 EnoDisc®

Product datasheet

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### AL-512-01-868 IP-ENOCLEAN-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-ENOCLEAN-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<br>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,<br>non- condensing |
| Protection class | IP20                                      |

### Dimensions and weight

|            |                                 |
|------------|---------------------------------|
| Weight     | 95g                             |
| Dimensions | Diameter 110 mm<br>Height 38 mm |

### Standards / approvals

|    |                              |
|----|------------------------------|
| CE | 2014/53/EU RED directive     |
|    | 2011/65/EU + addendum        |
|    | 2015/863/EU RoHS-3 directive |

### Factory settings

|      |          |
|------|----------|
| IP   | Via DHCP |
| Port | 8424     |

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## Table of supported EEP (EnOcean Equipment Profile)

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### 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

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#### 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).

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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 flushing all 10 seconds = Receiving data from TCP connection
- LED flushing = 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®**

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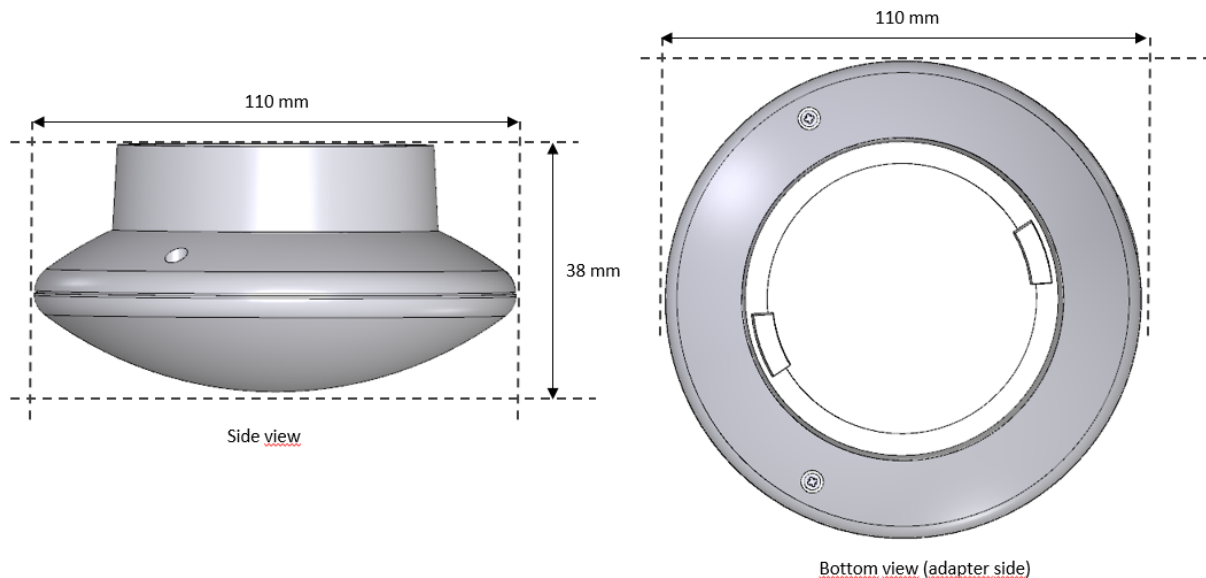
#### **Receive EnOcean telegrams**

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                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AL-512-01-868</b><br><b>IP-ENOCHEAN-BRIDGE POE / RJ45 /</b><br><b>EnoDisc® / white / CE</b> | 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 |
| <b>AL-512-01-868</b><br><b>IP-ENOCHEAN-BRIDGE POE / RJ45 /</b><br><b>EnoDisc® / black / CE</b> | 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 |