Installation and operating manual
Enocean interior luminosity sensor

Ref. *10020053*

1.1 Use

The luminosity sensor 0$_2$**LINE** ***10020053*** is designed to measure the interior luminosity and transmit it wirelessly to a matched receiver. Having a measuring range of 50 to 1020 lx, the sensor immediately transmits a signal as soon as the change in luminosity exceeds 20 lux. Moreover a signal is sent every 20 minutes if there is no change.

Note: Read the operating manual carefully before initial use.

1.2 Guarantee terms

This operating manual is an integral part of the device and our guarantee terms. It must always be delivered to the user. We reserve the right to modify the technical design of these devices without warning. **TRI0$_2$SYS** products are manufactured and their quality checked by making use of the latest technologies and taking into account the applicable national and international directives. If nevertheless a fault arises, **TRI0$_2$SYS** undertakes to remedy the default as follows, without prejudicing the rights of the end customer that arise from the sales contract with his reseller:
If the event of exercising of a legitimate and regular right, **TRI0$_2$SYS**, may at its sole discretion, rectify the device fault or supply a fault-free device. Any claim beyond this and all claims for consequential damages are excluded.
A legitimate fault exists if the device cannot be used at the time of delivery to the end customer because of a design or manufacturing defect or if its practical use is severely limited. The guarantee is void in cases of natural wear and tear, incorrect use, incorrect connection, where the device has been repaired or external influence. The period of guarantee is 24 months (from the date of invoicing). French law applies to the regulation of guarantee rights.

1.3 Recycling of the device

To recycle the device, conform to the legislation and standards in force in the country of use.

2. Safety

Observe the following points:
• The laws, standards and directives in force.
• Best practice at the time of installation
• The device operating manual.
• An operating manual can only give general instructions. They must be interpreted in the context of a specific installation.

The device is intended solely for use conforming to its purpose. Any repairs or modifications by the user are forbidden! Do not use with other devices the operation of which could endanger people, animals or property.

3. Technical characteristics

General characteristics	
Transmission frequency	868.3 MHz
Transmission power	< 10 mW
Ambient temperature	From -20°C to +60°C
Degree of protection	IP 54
EnOcean Equipment Profiles	A5-06-02
Size	80x32x18 mm
Weight	22g
Minimum charging time	5 min at 250 lux
Minimum charging time / day	3h at 400 lux
Operating time in total darkness (fully charged)	4 days
Luminosity	
Measurement range	From 50 to 1,020 lux
Transmission if change > 20 lux	100 seconds
Repetition	
Transmission without change	Every 20 minutes

Range in buildings	
Masonry	20m, through 3 walls at most
Reinforced concrete	10m, through 1 wall/ceiling at most
Plasterboard / wood	30m, through 5 walls at most

Note: The signal strength between the transmitter and the receiver decreases as the distance increases. Where there is a line of sight connection, the range is approximately 30 m in corridors and 100 m in large workshops or halls. The range can be increased with an 0$_2$**LINE** repeater.

4. Installation and initial use

4.1 Installation instructions:

⚠ Never mount the sensor in a metallic casing or close to a largely metallic object. Installation on the ground or close to the ground is not at all recommended.

- The sensor is intended for interior installation
- Secure the support using double sided adhesive tape (not supplied - observe the sense in the illustration)
- Insert the sensor on the support and slide it downwards until the assembly clips together.

4.2 Initial use:

For initial use, charge the product for 5 minutes with a luminosity greater than 250 lux.

Note: Dirt impairs the correct operation of the sensor. Therefore the sensor must be kept clean (on the solar panel side). To clean, use a damp cloth. Use water to which standard household washing up liquid has been added.

5. Controls and functions

The ***10020053*** sensor transmits the measured luminosity using the frame described in the document EnOcean Equipment Profiles EEP §A5-06-02 (consultable under www.enocean.com).

5.1 Programming and LRN button:

• Set the receiver to learn mode (see the product operating manual)
• To start the sensor in **LRN** mode,
simply insert a pin (not supplied) in the hole situated on the back of the sensor (see illustration)

5.2 Luminosity measurement and repetition:

The measured luminosity is within the range 50 - 1,020 lux. If a change exceeds 20 lux, a message will be sent immediately.
If changes remain below this level, the luminosity is transmitted approximately every 20 minutes.

6. Troubleshooting

6.1 New or existing installation

• If the receiver functions at a shorter distance relative to the sensor, it is subject to interference or used outside the transmission range.
• Search the system environment for changes that could cause the interference (for example movement of metallic cabinets, furniture or partitions).
• Use the sensor or receiver in a more suitable location.
• Clear the receiver and perform a new learn process.

6.2 Limitation of the range of the radio signals

• Transmitter/receiver used close to metallic objects or close to materials containing metallic elements. Observe a distance of at least 10 cm.
• Humidity in the materials.
• Devices emitting high frequency signals such as audio and video systems, computers, electronic ballasts or fluorescent tubes. Observe a distance of at least 0.5 m.

6.3 Contacts

E-mail:..... contact@trio2sys.fr

7. Declaration of conformity

These products can be marketed and distributed in the countries of the European Union, Switzerland, Iceland and Norway. **TRI0$_2$SYS** hereby declares that the sensors ***10020053*** conform to the base requirements and other applicable requirements of the directive 1999/5/CE referred to as R&TTE.