

# LUXON SENSOR BRIDGE FOR SMART LIGHT CONTROL

Option for Nedap Luxon wireless light control system

## INTRODUCTION

The Sensor Bridge is introduced to add commercially available sensors to the Nedap Luxon light control system.

Once installed the Sensor Bridge is part of the Senzafil Mesh Network.

Sensor data is transferred by this RF network to minimize wiring efforts.

Amongst the validated sensors you will find sensors to detect light level, movement or room occupancy.

Now it is easy to add sensing capabilities to your Luxon E-series light control system to save more energy.

## DESCRIPTION

The Luxon Sensor Bridge consists two main parts:

The dome with the RF electronics and microcontroller

The base is used for cable connections for power and sensor.

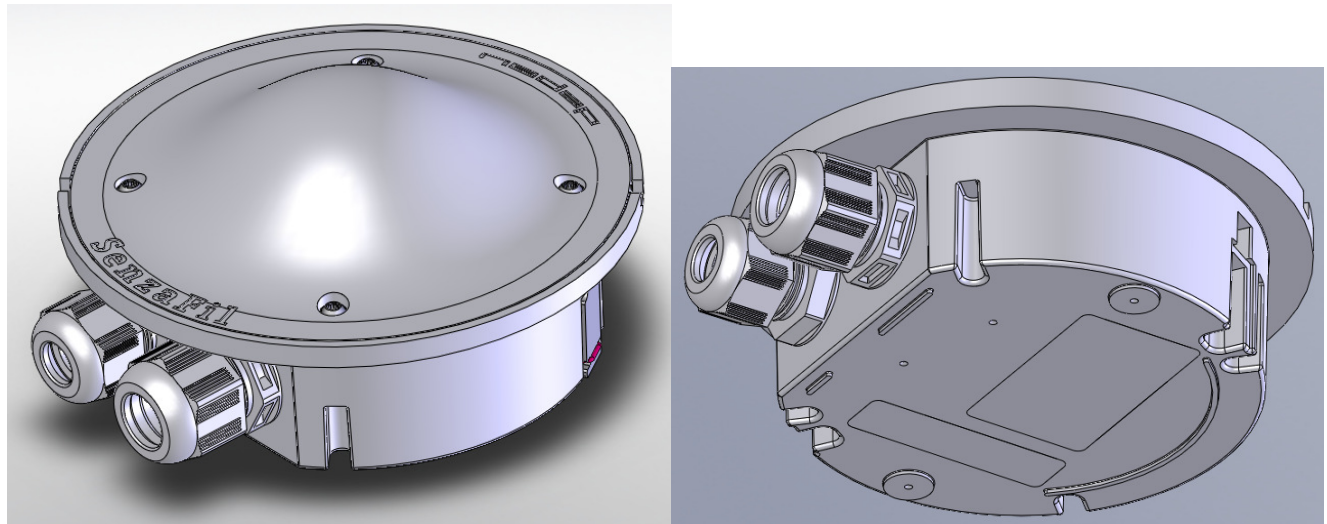


Figure 1: Luxon Sensor Bridge, version for surface mounting

## USE

Powering:

The Sensor Bridge is powered from a mains adapter or similar DC-source supplying 12 to 24V. This voltage is also available for the sensor, so you can choose the supply voltage depending on the voltage needed for the sensor to be used.

Power connection via either a standard DC-plug or screw terminals.

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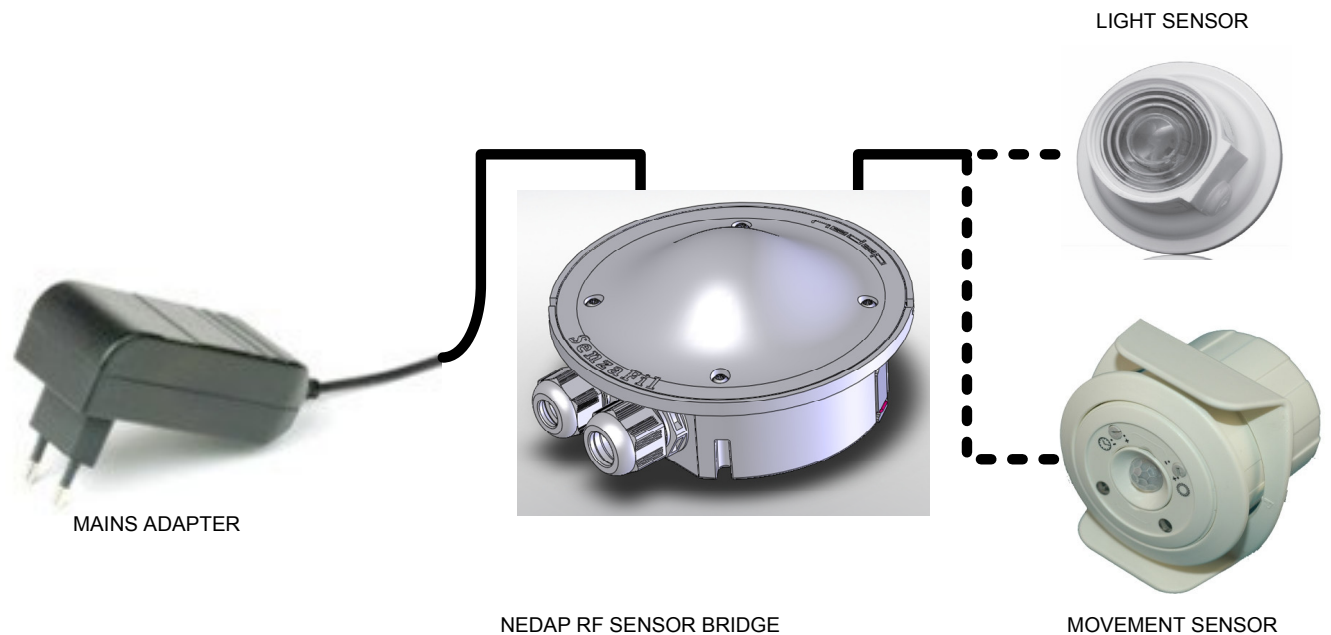


Figure 2: Wiring overview for the Luxon Sensor Bridge

Compatible sensors:

Many sensor types can be used:

- Switches;
- 1 to 10V dimmers (resistive and electronic potentiometers);
- Light sensors;
- Sensors for detection of movement and / or room occupancy.

To select an appropriate sensor that fits your application and your preferences, please use the listing available on our web site [www.nedaplightcontrols.com](http://www.nedaplightcontrols.com).

## INSTALLATION AND OPERATION

The Sensor Bridge may only be installed and configured by qualified and trained personnel.  
For an installation example please see figure 3 below.

The Sensor Bridge can be ordered for surface mounting or for recessed mounting; the dome should always point downwards if mounted at approximately the same height as the Senzafil lamp drivers. For recessed mounting, both clamps can be used to secure the unit to a ceiling element. After finishing the connections, the dome shall be secured to the base using four torx screws. After powering the Sensor Bridge it shall be configured using the Senzafil Configuration Tool. From the pick list you can easily select the used sensor with its characteristics.

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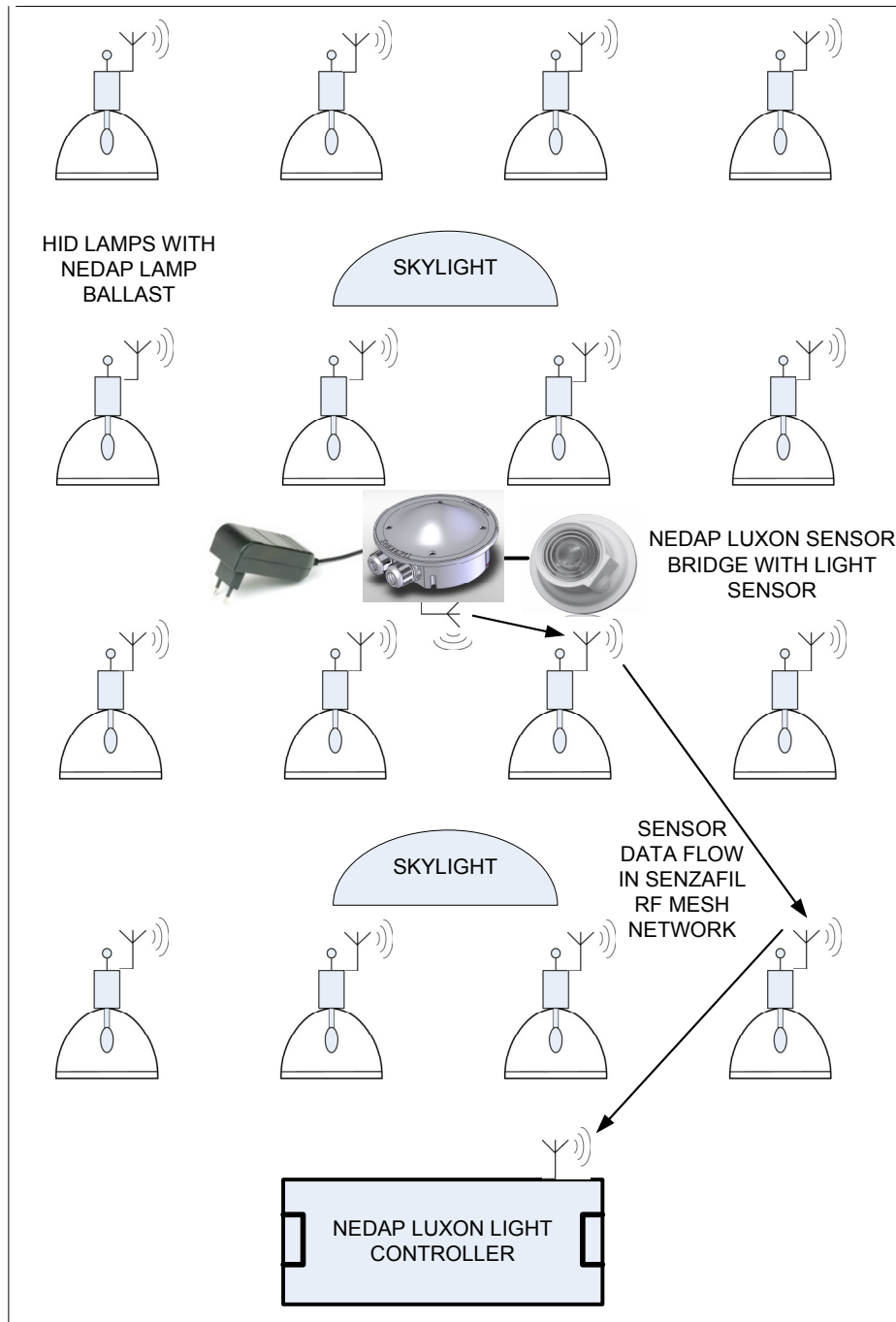


Figure 3: Installation example for the Sensor Bridge with HID lamps controlled via the Wireless Senzafil Mesh Network in a building with skylights.

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## TECHNICAL SPECIFICATIONS

| Description                 | Details   |
|-----------------------------|---|
| Supply Voltage              | 10 to 28VDC   |
| Supply current              | Sensor Bridge: max 100mA, standby < 20mA<br>External sensor: max 200mA  |
| Mains adapter specification | 12V / 4W or<br>24V / 6W   |
| Dimensions                  | Diameter: 130 mm, Height 70 mm  |
| Weight                      | 0.23kg including cable glands   |
| Enclosure protection        | <b>IP67 (the enclosed cable glands must be used properly)</b>   |
| Housing colors              | Base: light gray, top: milky grey-white   |
| Connector                   | power: standard DC jack with 2.0 mm centre pin or 2 screw terminals 30-18 AWG, or 0.25 to 1.5 sq.mm.<br>sensor: 3 screw terminals 30-18 AWG, or 0.25 to 1.5 sq.mm.  |
| Safety                      | <b><u>United States and Canada</u></b><br><b>An UL listed mains adapter shall be used that meets the NEC Class 2 requirements</b><br><b>The Sensor bridge is designed to meet UL619</b><br><b><u>Europe</u></b><br><b>An EN60950 compliant mains adapter must be used</b> |
| EMC                         | <b><u>United States and Canada</u></b><br><b>FCC47 part 15</b><br><b><u>Europe</u></b><br><b>EN301 489-1 and 489-3</b><br><b>EN300 328</b>  |
| Temperature                 | <b>Operating 0 – 60°C, Storage -20 to 80°C</b>  |
| Humidity                    | <b>25 to 95 % RH. Condensing and icing max 5% of time</b>   |

## PART NUMBERS

Luxon Sensor Bridge for surface mounting: 8018669, ordering nr. 9949348

Luxon Sensor Bridge for recessed mounting: 8019037, ordering nr. 9949356

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## FCC Declarations

### Compliance statement (part 15.19)

This device complies with part 15 of the FCC Rules and to RSS210 of Industry Canada.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### Déclaration Conformité

Cet appareil se conforme aux normes RSS exemptés de license du Industry Canada.

L'opération est soumis aux deux conditions suivantes

- (1) cet appareil ne doit causer aucune interférence, et
- (2) cet appareil doit accepter n'importe quelle interférence, y inclus interférence qui peut causer une opération non pas voulu de cet appareil.

### Warning (part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### RF Exposure (OET Bulletin 65)

To comply with FCC RF exposure requirements for mobile transmitting devices, this transmitter should only be used or installed at locations where there is at least 20cm separation distance between the antenna and all persons.

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