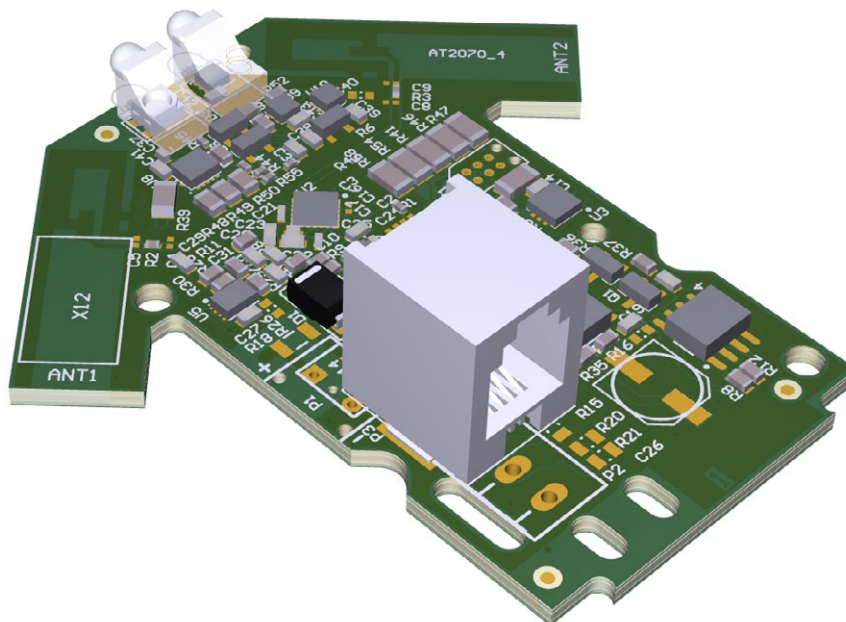PSPL

WCM-V2-LIGHT

Long range intrinsically safe ATEX & IECEx Bluetooth Connectivity Module for integrating a DALI-2 master

The WCM-V2 (Wireless Control Module) integrates connected devices into a **Wirepas** or **Bluetooth**® enabled Mesh network. The WCM-V2-LIGHT is used to integrate an LED light fixture into such a network.

Applications

✔ **Due to their IECEx and Atex certificates, the WCM-V2-LIGHT devices are mostly used in light fixtures installed in harsh and explosive environments.**

✔ **The main fields of operation for this type of device are the oil and gas industry, chemical plants and industrial steelwork/foundry sites.**
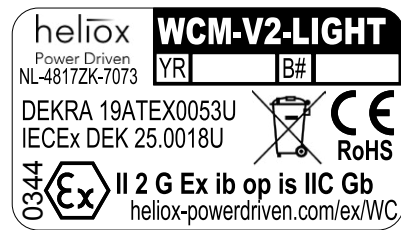
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Product type marking

Each WCM module is marked with a sticker.
This sticker shows the following information:

- ✔ **Certification product type**
- ✔ **Identification numbers product**
- ✔ **Ex marking information**
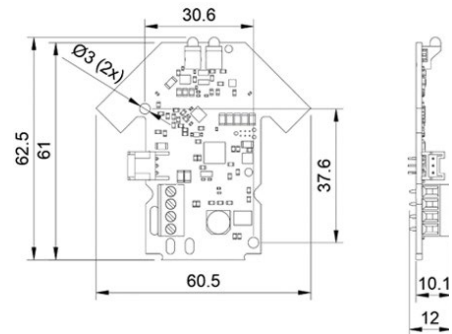- ✔ **Production year and batch number (blank in the example).**

Mechanical installation

All WCM modules share the same mounting layout.

Non-metallic M3 screws or clip-on connectors should be used to secure the WCM on a non-metallic mounting plate. Heliox can review all other mounting solutions upon request.

When mounting the WCM V2, please ensure a minimal clearance of 1.5mm to the nearest metal component.

Electrical installation

The WCM-V2-LIGHT has a FCC 47 CFR Part 68 RJ-9 modular connector on board (P3).

The pinout of the connector is as follows:
- ① GND
- ② RS-485-A
- ③ RS-485-B
- ④ Vin

Please ensure that – in the final mounting position – there is no risk for mechanical stress on the wiring as well as on the connector.

Atex & IECEx Entity parameters & Power supply

Connector P3 (RJ-9 socket):
U_i= 7.14 V; I_i= 261 mA; P_i= 465 mW; L_i= 0 µH; C_i= 7,0 µF.

Schedule of limitations

- ✔ **Protecting enclosure required with IP20 rating minimum according IEC 60529**
- ✔ **Ambient temperature range is -40 °C to +75 °C.**
- ✔ **The clearance between the board parts and metal objects shall be 1.5 mm minumum**
- ✔ **The clearance between the LED and any object shall be 1.5 mm minimum.**
- ✔ **Maximum board temperature is 94 °C under fault conditions.**
- ✔ **Maximum component temperature is 147 °C, for components with a surface area < 1000 mm2.**

Applying a custom light guide directly to the WCM-V2 LED within a 1.5 mm distance will be assessed by the notified body during the total product assembly certification

Initial start-up

To configure the WCM-V2-LIGHT, please power on (insert RJ-9 cable with correct pinout as shown above) within the range of a **Bluetooth** Mesh network. After power-up, follow the configuration steps in the network commissioning & configurator software tools.

Defective products

If the WCM malfunctions, contact Heliox Power Driven for a replacement product. The WCM modules may not be repaired by any party other than those approved by Heliox Power Driven.

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