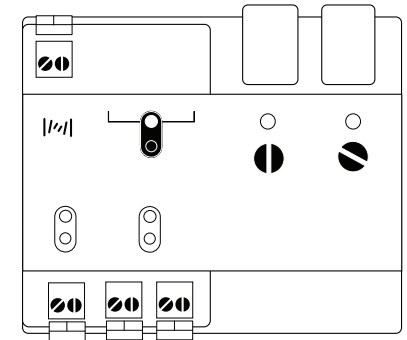




Warnings

- The device must be installed on DIN rail in cabinets or distribution boards with a cover.
- The maximum distance between devices on the Gate DALI Wired is 100 metres.
- The cable used in Gate DALI Wired must be Ethernet category 5 or higher, with crossover configuration.
- The maximum length of the DALI bus is 300 metres, using 1,5 mm² cable.
- The sum of the power consumption of all devices connected to the DALI bus must not exceed 250 mA. For example, a valid installation could contain 64 luminaire drivers (2 mA/unit), 4 keypads (10 mA/unit) and 3 sensors (24 mA/unit).

ProtoPixel Brain Standard

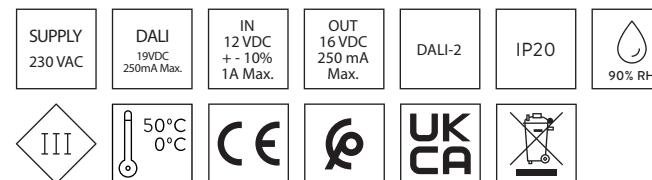


Overview

The ProtoPixel Brain is a Lighting Management Unit for functional and dynamic lighting projects. It supports one DALI universe and can be easily scaled by expanding with ProtoPixel Gate DALI Wired.

- All in one: TCP/IP, DALI2 (DT6, DT7, DT8, Sensors and input devices) and allows control over 64 control gears and 64 input devices.
- DALI power supply incorporated Guaranteed current on the DALI bus: 240 mA
- Scalable: up to 50 ProtoPixel Gate DALI Wired

Technical Characteristics



1 Power Supply

The device must be powered by an alternating voltage of 230 V.

2 Ethernet Port

The Ethernet port is designed for Internet connectivity. The Ethernet connection of ProtoPixel Brain does not support the IP range 172.23.X.X.

3 Communication Terminals

The Brain network is an Ethernet network in which it is recommended to exclusively use ProtoPixel Gate DALI Wired devices. . The several devices can be interconnected via switches or routers. It is recommended to connect a maximum of 50 devices with the Brain. The Ethernet cable must be category 5 or higher, with crossover configuration.

4 DALI Terminals

Guaranteed current on the DALI bus: 240 mA The module has a shutdown protection system: Shutdown after 650 ms with a retry after a maximum of 5 s. Subsequent retries, with a duration of maximum 2s, are performed every 15 s maximum.

5 LED system indicator

	Fixed LED
Off	No Supply
Green	OK without internet access
Blue	OK with internet access
Red	Error

6 System Button

Short press ($t < 10$ s): Device reboot
 Long press ($t > 30$ s): Factory reset

When starting a long press, SYSTEM LED blinks in white. When the press has reached 10", the LED blinks rapidly. Once pressed for 30", the LED remains fixed in magenta. If the button is pressed for more that 40", any action will be canceled.

7 DALI LED indicator

	Supply	Communications
Off	×	×
Fixed	✓	×
Blinking	✓	✓

Rapid blinking (300 ms) indicates that the bus scanning process is active.

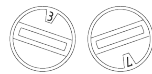
8 DALI Button

Short press ($t < 5$ s): Switch on/off all luminaires.

9 Address selector

The values of the selectors correspond to the tens and units of the ProtoPixel Brain identifier number. The identifier must be between 0 and 79, both included.

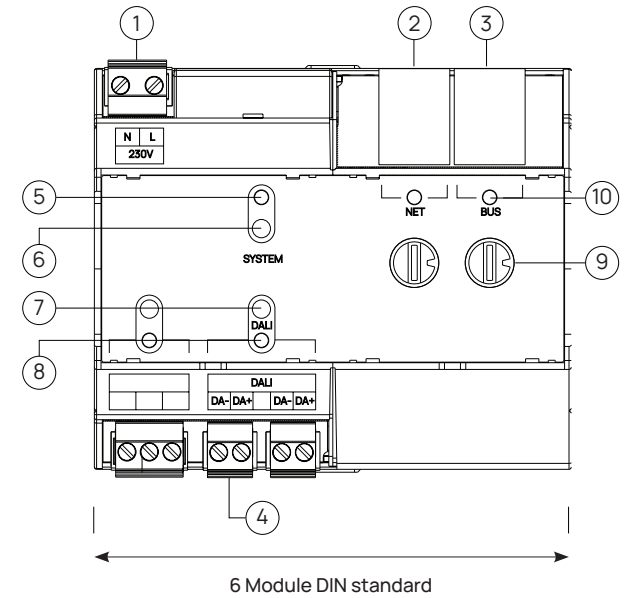
Example: Identifier number 37



10 Ethernet LED

Flashes when receiving/ sending each data frame.

References



Connection Diagram

