

OVERVIEW

The DALION can be used to automatically perform DALI room control with occupancy, daylight harvesting, demand response, and more. The gateway functionality allows bidirectional communication between DALI (Digital Addressable Lighting Interface) networks and BACnet systems. It integrates many functionalities to ease the installation of DALI lighting on the BACnet network.

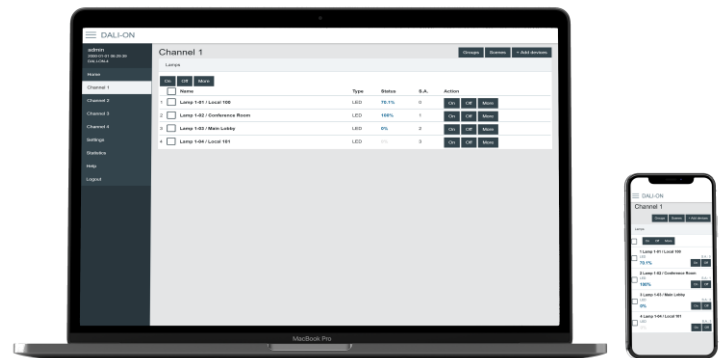


KEY FEATURES

- ✓ Equipped with four DALI channels. It can control up to 256 DALI drivers. This is 64 drivers with 16 groups and 16 scenes per channel
- ✓ Can integrate up to 32 DALI-2 input devices (control devices) per DALI channel. Light sensors, occupancy sensors and buttons can be configured via the web interface and made accessible to BACnet
- ✓ DALI channels, groups, lamps, scenes and inputs are accessible through BACnet standard objects
- ✓ Weekly time clock schedules
- ✓ Room Light Control, allow to automatically adjust the light intensity depending on external inputs such as occupancy, presence, and light sensors
- ✓ A responsive web interface allows configuring and commissioning, therefore no special software is needed
- ✓ BACnet/IP protocol
- ✓ Integrated two-port Ethernet switch for a daisy chain topology

RESPONSIVE WEB INTERFACE

The web user interface adapts to all screen sizes. It allows modifying system settings as well as performing the DALI devices commissioning.



TUNABLE WHITE READY

Adjustment of the light from warm white to daylight thanks to the compatibility with DALI Type 8 (DT8) drivers.



DALI-2 INPUT DEVICES

Support for the integration of DALI-2 sensors and buttons.



DALI

- ✓ Support for IEC 62386 DALI devices:
 - Fluorescent lamps – 201 (device type 0)
 - Self-contained emergency lighting – 202 (device type 1)
 - DC voltage converter – 206 (device type 5)
 - LED modules – 207 (device type 6)
 - Switching function – 208 (device type 7)
 - Colour control – 209 (DT8)
xy-Coordinate, colour temperature Tc, primary N and RGBWAF
 - Input devices – Push buttons – 301
 - Input devices – Occupancy sensor – 303
 - Input devices – Light sensor – 304
- ✓ Integrated DALI packet analyzer

BACNET

- ✓ BACnet/IP protocol
- ✓ BACnet service COV (Change of Value)
- ✓ Allows controlling DALI ballasts and drivers individually, by group, or by channel
- ✓ Analog Input objects for the feedback of lamps, groups, and channels
- ✓ Analog Output objects for the control of lamps, groups, and channels
- ✓ Multi-State Output objects to recall, store and erase DALI scenes
- ✓ Analog Input objects for the light sensors
- ✓ Binary Input objects for the occupancy sensors
- ✓ Loop objects for the Room Light Control

SPECIFICATIONS

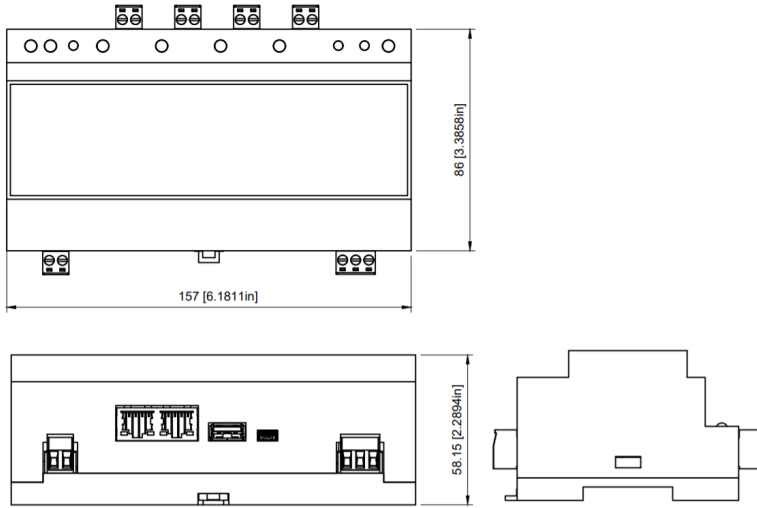
Power supply	24 VAC 50/60 Hz or 24 VDC
Dimension	157 x 86 x 59 mm, 6.181" x 3.386" x 2.323" (L x W x H)
Fixation	DIN rail
Enclosure material	UL 94 V-0
Operating temperature	0 °C to 45 °C (32 °F to 113 °F)
DALI channels	4
Ethernet interface	2, RJ45 port, 100BASE-T, BACnet/IP, HTTP
Firmware	Upgradable firmware

ORDERING INFORMATION

Model Number	Model Description
DALION-4	BACnet/IP - DALI, DALION controller with 4 DALI channels

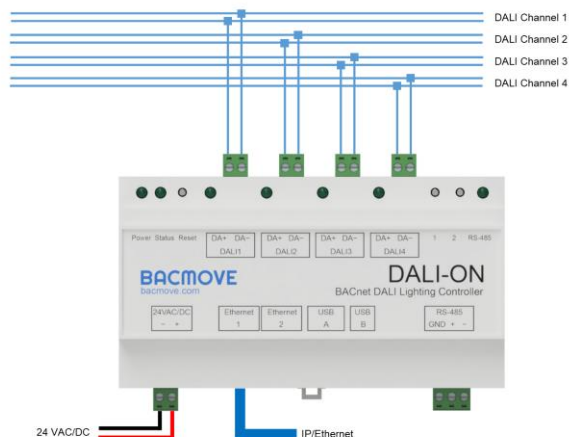
DIMENSION

The dimensions are 157 x 86 x 59 mm, 6.181" x 3.386" x 2.323" (L x W x H).

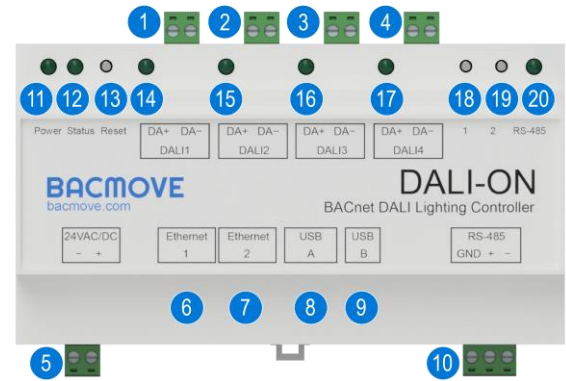


DALI WIRING

The bus wiring must be connected in a star topology, a linear topology, or a mixture of the two. Wiring must not be carried out in a ring structure. The two wires that serve as the bus must be located in the same cable or cable conduit. In the cable or cable conduit, the two wires must be side by side to avoid unintentional coupling to other signals.



CONNECTORS



1. DALI Channel 1 connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
2. DALI Channel 2 connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
3. DALI Channel 3 connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
4. DALI Channel 4 connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
5. 24 VAC/VDC power supply connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
6. First Ethernet RJ45 connector
Connect the LAN Ethernet network to this port.
7. Second Ethernet RJ45 connector
Switch port with the first Ethernet connector.
8. USB host connector (USB 2.0 – A)
For connecting a USB accessory.
9. USB device connector (USB 2.0 - Mini-B)
For the USB console.
10. RS-485 connector (5.08 mm [0.200"]) 3 position pluggable terminal blocks header.
11. Power indicator LED
This LED is on when the DALION is powered.
12. Status indicator LED
This LED blinks to indicate the status of the DALION.
13. Reset IP button (use with electrically insulated tools).
Pressing this button for four (4) seconds will reset the IP configurations to the factory default value.
14. DALI Channel 1 LED
Activity LED for the DALI channel 1.
15. DALI Channel 2 LED
Activity LED for the DALI channel 2.
16. DALI Channel 3 LED
Activity LED for the DALI channel 3.
17. DALI Channel 4 LED
Activity LED for the DALI channel 4.
18. Button 1
Pressing this button sends 0% to all lamps.
19. Button 2
Pressing this button sends 100% to all lamps.
20. RS-485 LED
Activity LED for the RS-485.