# BACMOVE

# **DALION** BACNET DALI LIGHTING CONTROLLER

# **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 Lightning 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 (DALION-4) or one (DALION-1)
   DALI channels. It can control up to 256 (DALION-4) or 64 (DALION-1) 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

# **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.

admin 2001-01-01-00-20-20	Channel 1				Orașe Danes - Abl devlan	
ENLIGNA Martin	Large					
Channel 1	Cis Cit Mare					
Channel 2	Name 1 Lawsp 1-01 / Local 100	Type	61stan 75.15	6A. 0	On Of Mass	
Channel 3	2 Lang 1-92 / Contenence Room	LED	100%	-	On OF New	
Channel 4	3 Large 1-02 / Nam Labley	LED	0%	2	On OF Mass	
Serings	4 Lamp 1-04 / Local 191	LED		0	On OF More	
Darinden						
****						
Logost						
					= 04U	
					Chano	
						Saat 5
						(# Mill)
						1-P11Lanar
					215	143/0+84
					1 Long Trans	545/Mairi
					*Carg	104/Loos

## TUNABLE WHITE READY

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



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
  - o Input devices Push buttons 301
  - o Input devices Occupancy sensor 303
  - o Input devices Light sensor 304
- ✓ Integrated DALI packet analyzer

#### **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 channels4 (DALION-4), 1 (DALION-1)Ethernet interface2, RJ45 port, 100BASE-T, BACnet/IP, HTTPFirmwareUpgradable firmware

### ORDERING INFORMATION

Model Number	Model Description
DALION-4	BACnet/IP - DALI, DALION controller with 4 DALI channels
DALION-1	BACnet/IP - DALI, DALION controller with 1 DALI channel

#### DALION DATASHEET Roo12 © 2024 TECHNOLOGIES BACMOVE INC. This information can be modified without notice.

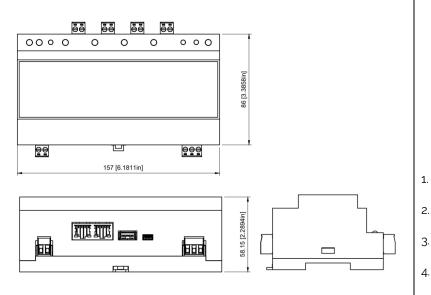


# BACNET

- ✓ 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

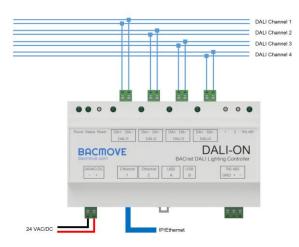
## DIMENSION

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



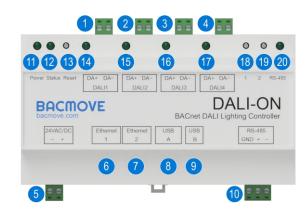
# DALI WIRING

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.



\*The DALI Channel 2, 3 and 4 are only available on the DALION-4 model.

### CONNECTORS



- DALI Channel 1 connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
- \*DALI Channel 2 connector (5.08 mm [0.200"]) 2 position pluggable terminal blocks header.
- \*DALI Channel 3 connector (5.08 mm [0.200"])
   2 position pluggable terminal blocks header.
- \*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.
- Second Ethernet RJ45 connector Switch port with the first Ethernet connector.
- 8. N/A
- 9. USB device connector (USB 2.0 Mini-B) For the USB console.
- 10. N/A.
- 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.
- \*DALI Channel 3 LED Activity LED for the DALI channel 3.
   \*DALI Channel 4 LED
- 17. \*DALI Channel 4 LED Activity LED for the DALI channel 4.
- Button 1 Pressing this button sends 0% to all lamps.
   Button 2
- 19. Button 2 Pressing this button sends 100% to all lamps.
- 20. N/A

