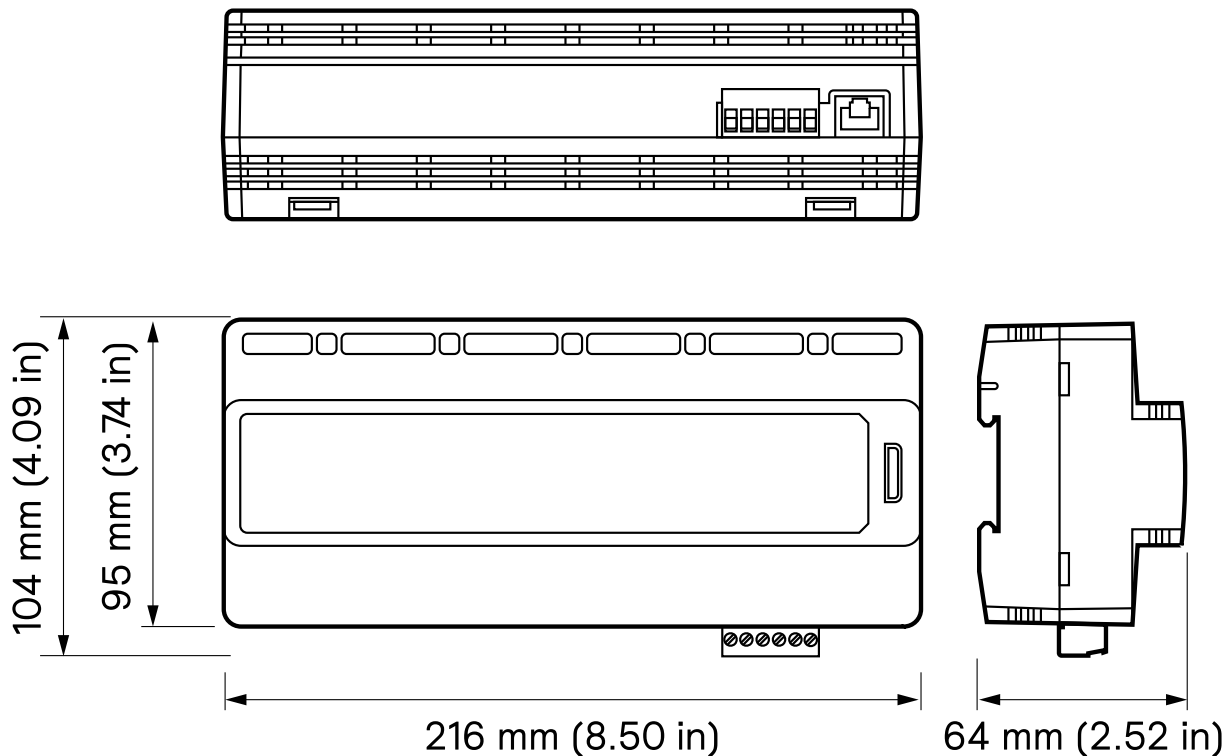


Key Features

- **Single-master solution** - Compatible with a range of DALI fittings and devices, including fluorescent drivers, electronic low voltage transformers, LED fixtures, emergency lighting fixtures, and Dyalite DALI sensors and user interfaces.
- **Compatible with DALI 207 and DALI 209** - Provides control of tunable white and RGBWAF luminaires.
- **Driver standby power elimination** - Internal switched relay automatically isolates the power circuit when all drivers are dimmed to 0%.
- **DALI auto-enumeration** - Provides automatic enumeration of DALI drivers when powered on and enables self repair of the network system if a DALI driver fails.
- **Silent enumeration** - Constantly checks the DALI bus for changes, automatically enumerating individual driver replacements with no disruption to lighting performance.
- **UL 924 input** - Integrates seamlessly with compatible emergency systems.
- **Fully scalable network solution** - Direct mapping from DALI to DyNet eliminates DALI-imposed limits such as maximum group size.
- **Inbuilt Ethernet port** - Directly connecting to a site's LAN, the device can securely report its status and pass network messages via the Dyalite PDDEG-S (max 25 controllers per PDDEG-S).
- **Integral DALI bus power supply** - Removes the need for provision of a separate external power supply and reduces distribution board wiring complexity.
- **Driver management tools** - Includes lamp and driver status reporting, driver run time tracking, and emergency test reporting.
- **Onboard DALI test function** - Use the controller's service switch to set all connected lamps to full brightness, or flash on/off for a 5-minute test window, without additional software or input devices.
- **Onboard line override switch** - Set each DALI line's connected drivers to 100% or 0% brightness without additional software or input devices.

Dimensions



Specifications

| Electrical | | Physical | |
|--------------------------|---|----------------------------------|---|
| Supply Type | Single-Phase | Dimensions | 95 x 216 x 64 mm (3.74 x 8.50 x 2.52 in) |
| Supply Voltage | 100-277 VAC | Packed Weight | 0.6 kg (1.32 lb) |
| Supply Current | 0.5 A | Construction | Polycarbonate DIN rail enclosure (12 unit) |
| DyNet DC Output Voltage | 12 VDC | Serial Ports | 1 x RJ45 1 x 6-way pluggable screw terminal |
| DyNet DC Output Current | 300 mA | Serial Port Conductor Size | 0.3-2.5 mm ² (#22-12 AWG) |
| Switched Outputs | 3 x feed-through | DALI Terminals | 1 x 6-way screw terminal |
| Maximum CH-CH Voltage | 500 VAC | DALI Terminal Conductor Size | 0.2-5 mm ² (#24-10 AWG) |
| IEC Overvoltage Category | III | Switched Terminals | 1 x 8-way screw terminal (6 used, see Installation Instructions) |
| Control | | Switched Terminal Conductor Size | 0.2-5 mm ² (#24-10 AWG) |
| Communication Ports | 1 x RS-485 1 x Ethernet (10/100 baseT) | Supply Terminals | 1 x 3-way screw terminal |
| Supported Protocols | DyNet TCP/IP (TCP, UDP) IPv4 IPv6 | Supply Terminal Conductor Size | 0.2-5 mm ² (#24-10 AWG) |
| Network Security Layer | TLS 1.2 | Environment | |
| Control Channel Outputs | 3 x DALI-2 (DALI-2 certified and DALI registered drivers only) (Supports DALI 207 & DALI 209 Tunable White / RGBWAF) | Operating Temperature | -20° to 50°C ambient (-4° to 122°F) |
| Dry Contact Inputs | 1 (AUX / UL 924) | Storage/Transport Temperature | -25° to 70°C ambient (-13° to 158°F) |
| User Controls | 1 x service switch 3 x DALI line override switch 3 x DALI line test button | Relative Humidity | ≤90% non-condensing |
| Indicators | 1 x diagnostic LED 3 x DALI bus status LED 1 x Ethernet activity LED | IEC Pollution Degree | II |
| Diagnostic Functions | Lamp failure reporting Driver failure reporting Driver runtime tracking Switched output runtime tracking Emergency test reporting Device online/offline status | Installation Note | For indoor installation only |
| | | Compliance | |
| | | Certifications | DALI-2, CE, RCM, UL/cUL, FCC, ISED, UKCA, RoHS |

Diagnostic Note

- Dynalite System Manager required for analysing diagnostic data.
- The availability of some diagnostics is dependent on driver type.



Output Channel Ratings

| Load Type | UL/cUL (per channel) |
|-------------------|--|
| Electronic Driver | 16 A, 277 VAC |
| Pilot Duty | 6 A, 120 VAC 3 A, 240 VAC 2.6 A, 277 VAC |
| Inrush Current | 500 A |
| Load Type | CE (per channel) |
| Electronic Driver | 20 A, 240 VAC |
| Inrush Current | 500 A |
| Total Device Load | |
| ≤60 A | |

Control Channel Ratings

| DALI | |
|-------------------------|--------|
| Guaranteed Current | 220 mA |
| Maximum Current | 250 mA |
| Maximum Drivers/Channel | 64 |
| Maximum Drivers/Device | 192 |
| Insulation | Basic |

Note: Auto restart on DALI output overload or short circuit

DALI Device Count

The table below shows the maximum number of DALI drivers and Dyalite DALI-2 devices that can be connected to the DALI-2 bus at the same time.

These devices include Dyalite DNS-DALI sensors and the DLLI5I-DALI dry contact interface.

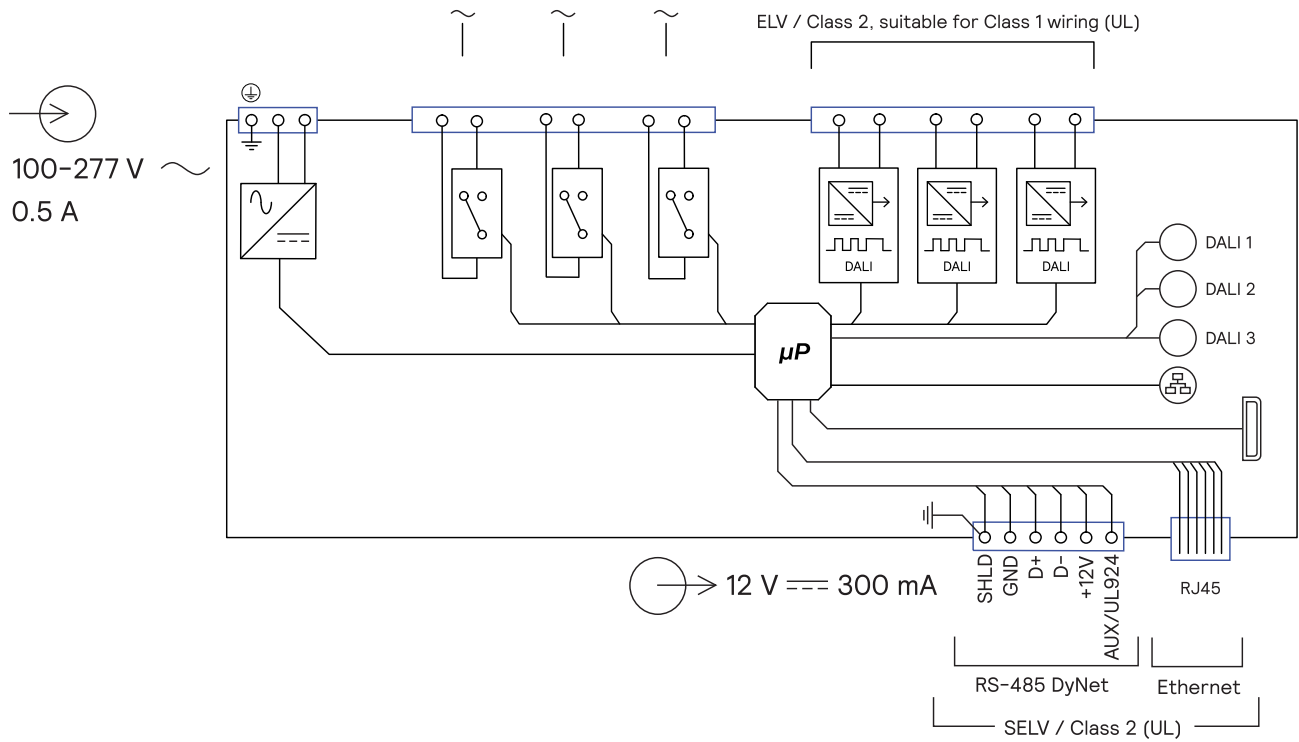
Max. 16 x DLLI5I-DALI per universe.

For high-bay and directional sensor device counts, refer to

<https://docs.dyalite.com/>

| Dyalite DALI Devices | DALI Drivers |
|----------------------|--------------|
| 16 | 64 |
| 20 | 54 |
| 22 | 44 |
| 26 | 34 |
| 30 | 24 |
| 34 | 14 |
| 40 | 0 |

Electrical Drawing



Ordering Codes

| | |
|--------------|--------------|
| Product | 12NC |
| DDBC320-DALI | 913703079709 |