

delmatic metro Dali Broadcast module



The **Dali Broadcast module** provides powerful control of up to 480 Dali luminaires across twelve Dali channels.

The module is typically used in areas such as car parks, corridors, and cores where control of individual luminaires is not required yet there is a requirement for adjustment of lighting levels through dimming.

The broadcast approach provides the dimming and monitoring benefits of Dali without the need to address ballasts on site: the module broadcasts commands to channels of Dali fittings while monitoring each luminaire.

Dali presence detectors, multisensors & switches connect direct to the Dali channel cables while Dali emergency devices also connect to the Dali buswire.

The module incorporates distributed intelligence, non-volatile memory, and a Lon neuron for seamless interoperability with other Lon building services.



■ **metro Dali Broadcast module**
product ref: **204A1**

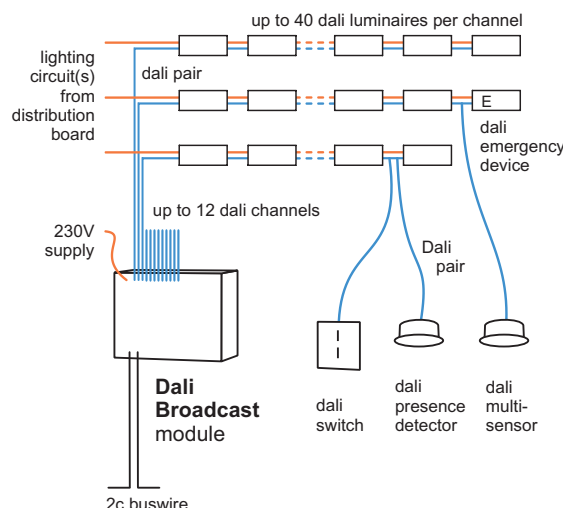
Dali broadcast application

The module provides twelve individually addressed Dali channel outputs with up to forty luminaires per channel.

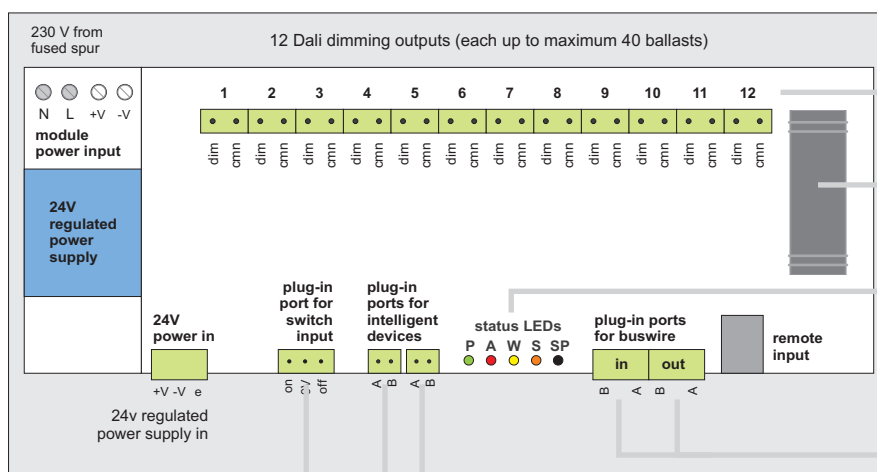
The module connects via a two-core cable to Dali ballasts on each channel as well as to Dali devices including presence detectors, multisensors & switches which control lighting on the channel: Dali emergency devices also connect to the two-core Dali cable. The module broadcasts independent switching and dimming commands to each channel while individually monitoring each lamp/ballast and emergency device for healthy operation or failure.

Lighting circuits are wired direct from the distribution board to the luminaires and a 230V supply powers the module electronics.

The module connects to the lighting management Lon bus and integrates Dali sub-networks into a building-wide network with the option of seamless interoperability with other Lon building services.



module features



Dali channel terminals - twelve sets of plug-in terminals for connection of two core Dali dimming output to luminaire ballasts: up to forty ballasts per output / channel.

plug-in intelligent Lon capsule (80-003) provides distributed intelligence, stores module operational parameters and enables seamless integration with other Lon devices

diagnostic/status LEDs and service pin
Power LED indicates 240V present
Alert LED indicates fault condition
Wink LED verifies comms - normally unlit
Service LED flashes in fault mode
Service Pin uploads module address

bus terminals - plug-in terminals for connection of two core Lon bus (from router or previous module and to next module).
(two bus plugs supplied - plug ref. 91041)

switch input for three core cable (on/off/common) from retractive switch
Module supplied with three-pin plug ref. 91043.

intelligent device inputs for connection of two core cable to devices including switches and sensors
Module supplied with two-pin plugs ref. 91042

delmatic metro Dali Broadcast module



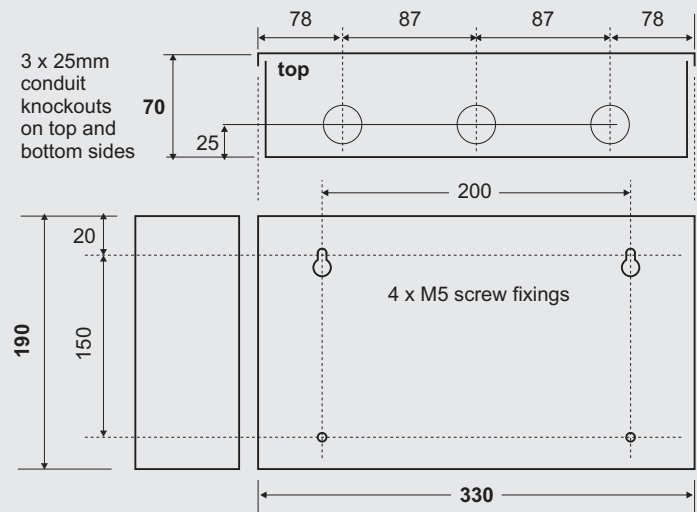
mounting, installation and dimensions

The module should be installed in an accessible location, ideally at a height of 1.5m from floor level.

The back box is mounted using four M5 screw fixings: the top two holes use keyhole fixings for ease of installation.

Top and bottom sides contain 3 x 25mm conduit entry knockouts.

All dimensions in millimetres.



technical details

supply

1 x 220-240V~ 50/60 Hz single phase circuit to power module

protection

module requires external protection by 10A MCB

Dali dimming outputs and connection

twelve Dali digital dimming channel outputs - up to forty Dali digital ballasts per channel.
2-pin plug-in port per Dali channel (max 1.5 sq.mm cable)

Dali sensors, switches and emergency devices

Dali sensors (presence detectors and multisensors), Dali switches and switch interfaces connect to the Dali channel bus and control Dali lighting on that channel: Dali emergency monitoring devices connect to the Dali channel bus.

Module accepts one direct input from momentary-action (retractive) switch

Module accepts connection of up to twelve intelligent switches and sensors on intelligent bus input cable for cross-channel control.

- intelligent bus plug-in terminal block accepts max 1 sq.mm cable.
- intelligent bus cable maximum length - 100m

Dali bus specification and length: recommended minimum Dali cable conductor size

up to 100 metres - 0.5 sq.mm - use Belden 8205

100 to 150 metres - 0.75 sq.mm

150 to 300 metres max - 1.5 sq.mm

Lon bus connection

2 plug-in ports for twisted pair Lon bus connection (max 1.5 sq.mm cable)

Lon bus specification

330 V rms - twisted pair Belden 7701NH unshielded 22 AWG stranded

600 V rms - twisted pair Belcom 4001P22S54LSZH unshielded 22 AWG solid

dimensions (mm)

330 w x 190 h x 70 d

construction

painted galvanised steel enclosure & lid to IP50 finished in RAL 7035 50% gloss

ambient temperature / relative humidity

0 to +50°C / 20% to 90% no condensation

Lon specifications

Echelon LonWorks FT 5000 Smart Transceiver

FTX3 free topology communications transformer

64k EEPROM

Conforms to LonMark 3.4 guidelines and profiles

