DALI Network Router (910)

The 910 Digidim Router uses an Ethernet connection (10/100 Mbps) as a network backbone, to combine DALI networks seamlessly.

Basic functionality is available 'out-of-box' without any programming. Helvar's Designer software allows for advanced configuration and functional programming of the router.

The system provides energy-saving features via presence detection and constant light functionality. Further automation can be achieved through scheduled events. OPC server software enables interfacing to Building Management Systems (BMS).

A PC can be connected to the system for diagnostics and logging purposes if required, but all data is stored within the system itself, so there is no need for PC control in daily operation. The elimination of a central controller ensures no single point of failure can cause a total system shutdown.
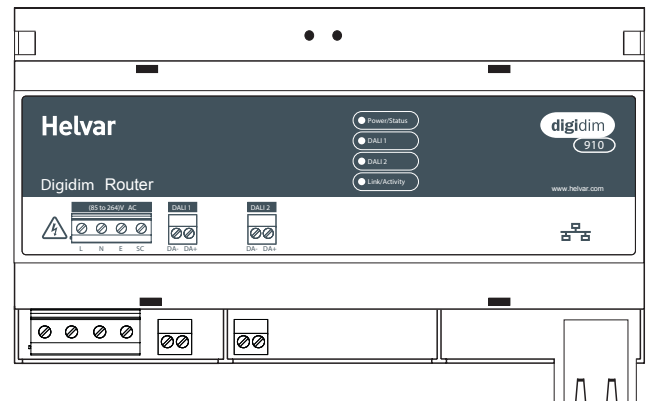
Key features

- Each router supports a total of 128 DALI devices (64 devices on each subnet)
- 250 mA power supply for each DALI subnet
- Up to 100 routers may be networked together
- Up to 12 800 DALI devices (16 000 groups) on a router system
- Industry standard protocols (TCP/IP, UDP/IP and DALI)
- Built-in real time clock
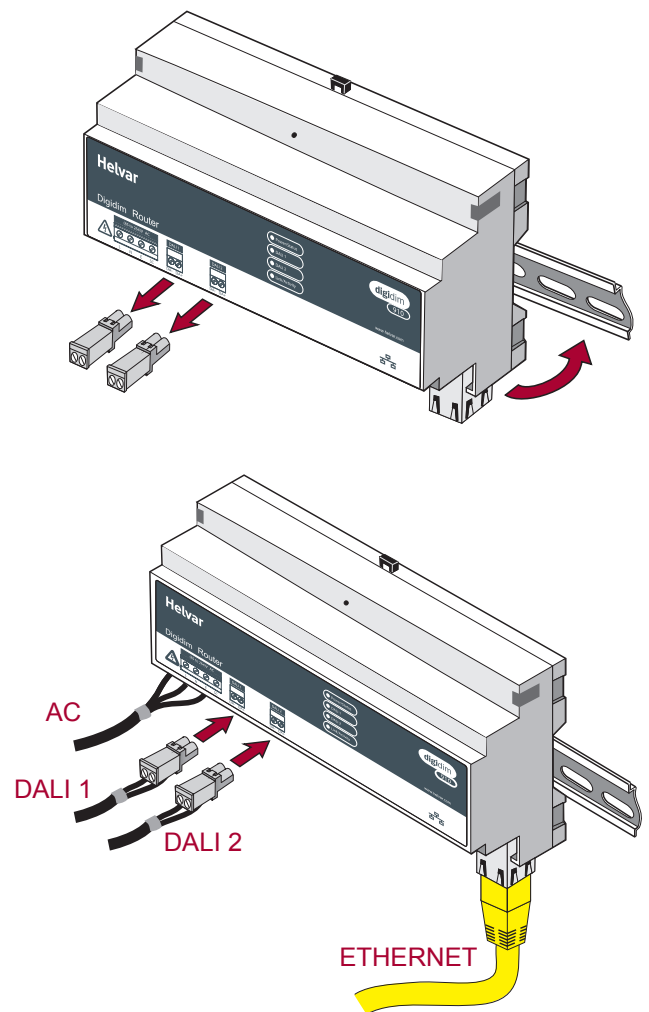- Universal supply input

Applications

- From single office rooms, meeting rooms and corridors to a fully networked office building
- From school classrooms to a networked multi-site University complex
- In hospitals, from patient rooms and treatment rooms to public areas

Installation Notes

- For installation in a restricted access location only
- Isolate the mains supply before installation
- The external mains supply must be protected. External protection must not exceed 6 A MCB
- All DALI and mains cabling must be 230 V mains rated
- Install the unit horizontally to allow for heat dissipation
- Any enclosure must provide adequate cooling ventilation
- Please refer to the 910 Digidim Router Installation Guide

Installation

Technical Data

Connections

Mains cable: Solid core up to 4 mm²
Stranded up to 2.5 mm²

DALI cable: 2-wire mains rated, 0.5 mm²
– 2.5 mm²
Recommended: 1.0 mm²
– 1.5 mm²
Maximum length: 300 m
(@ 1.5 mm²)

Ethernet: 1 × RJ45 10/100 Mbps, Cat 5E
up to 100 m (Auto MDI/MDI-X
crossover)

Power

Mains supply: 85 VAC – 264 VAC, 45 Hz – 65 Hz

Power consumption: 23 VA

Power circuit protection: 6 A MCB maximum

Supply

DALI: 2 × 250 mA (current limited)

Mechanical data

Dimensions: 9U – 160 mm × 58 mm × 100 mm

Weight: 260 g

Mounting: DIN Rail – keep mains and DALI
wiring separate from Ethernet
cable

IP code: IP00 (For installation in a
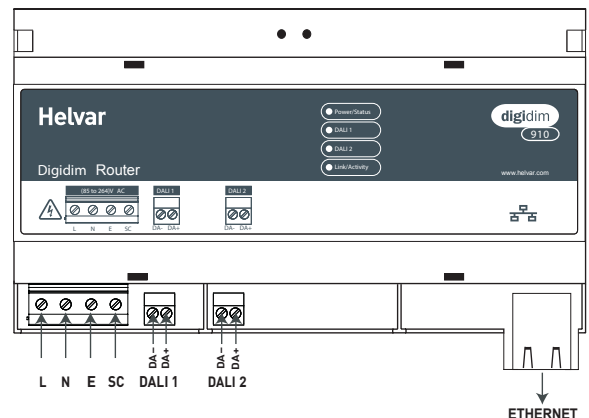restricted access location only)

Operating conditions

Ambient temperature: 0 ºC to +40 ºC

Relative humidity: Max. 90 %, non-condensing

Storage temperature: –10 °C to +70 °C

Conformity and standards

DALI data transfer: DALI standard IEC 62386, with
Helvar extensions

EMC emission EN 55015

EMC immunity EN 61547

Safety EN 60950

Isolation: 4 kV

Environment: Complies with WEEE and RoHS
directives

Inputs / Outputs

Dimensions