905 Helvar

Single DALI Subnet Router

The 905 Single DALI Subnet Router uses an Ethernet connection (10/100 Mbps) to connect to and control a local DALI network.

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. Integration with other building systems can be achieved using OPC or HelvarNET I/O functions.

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

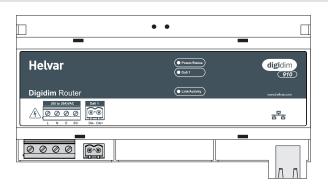
- Each 905 router supports a total of 64 DALI devices
- Up to 100 routers may be networked together
- Built-in real time clock
- Can be networked together to form large scalable systems
- Provides Local as well as Central control if required
- Fully compatible with other Helvar Routers (910/920)
- Integration with other Building systems

Applications

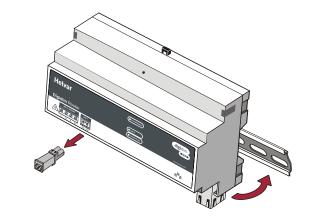
- Hotel Rooms and Suites
- Hospital Consultation Rooms and Wards
- Meeting Room Suites / Boardroom
- Class Rooms and Lecture Theatres
- Residential
- Individual areas (see above) can be networked together to allow Central Control.

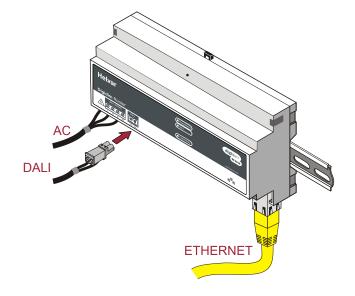
Installation Notes

- 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 905 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 to 1.5 mm²

Recommended: 1.0 to 1.5 mm²

Maximum length: 300 m (@ 1.5 mm²)

Ethernet: 1 x RJ45 10/100Mbps, Cat 5E up to

100 m (Auto MDI/MDI-X crossover)

Power

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

Power consumption: 23 VA

Power circuit protection: 6 A MCB maximum.

The external supply must be protected.

Supply

DALI: 250 mA (current limited)

Mechanical Data

Dimensions (mm): 9U – 160 (L) x 100 (H) x 58 (D)

Weight: 260 g

Mounting: DIN Rail - keep Mains and DALI wiring

separate from Ethernet cable

IP rating IP 30 (IP 00 at connectors)

Operating Conditions

Ambient Temperature: 0°C to 40°C

Relative Humidity: Max 90%, non-condensing

Storage Temperature: -10°C to 70°C

Conformity and Standards

DALI data transfer: DALI standard IEC60929, with Helvar

extensions

EMC Emission: EN 55 015

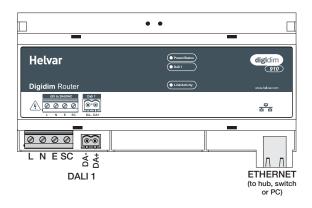
 Immunity:
 EN 61 547

 Safety
 EN 60 950

Isolation: 4 kV

Environment: Complies with WEEE and RoHS directives

Inputs / Outputs



Dimensions

