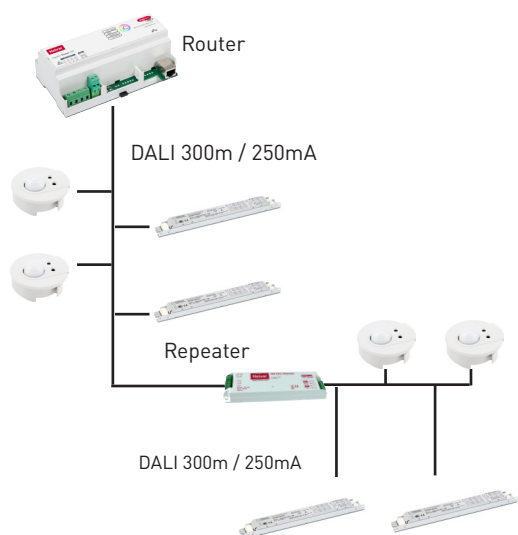# Application Guide

Helvar

DALI Repeater

Designed to extend the capabilities of a system, the DALI Repeater doubles the maximum DALI cable length from 300m to 600m and provides an additional 250mA of DALI power.

Router

DALI 300m / 250mA

Repeater

DALI 300m / 250mA

APPLICATION EXAMPLES
Office
Healthcare

2 + 3

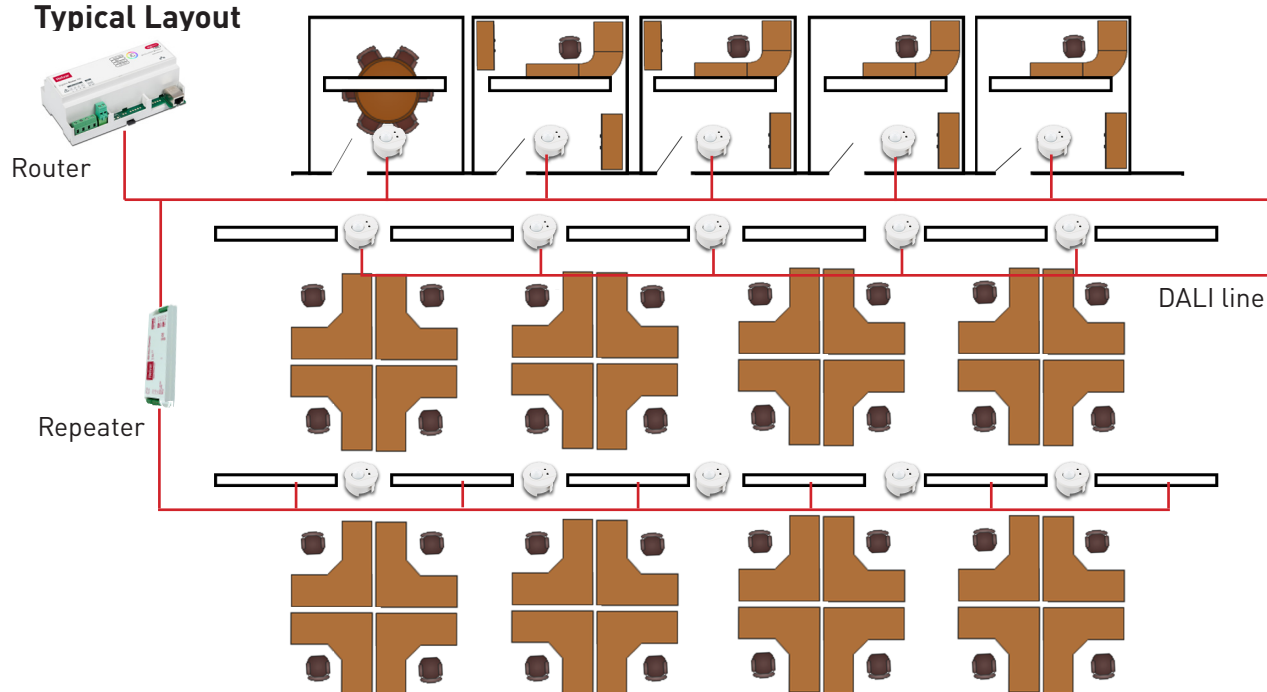TECHNICAL DETAILS

4

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freedom in lighting

1.1 OFFICE (open plan)

A busy office with an open plan environment requires an easy to use, flexible lighting solution that will encourage staff interaction in a comfortable and relaxed atmosphere.

Manual control is required at each entrance point for overall control of the main work areas, which are subsequently zoned and controlled via absence detection and daylight harvesting to achieve the maximum energy savings.
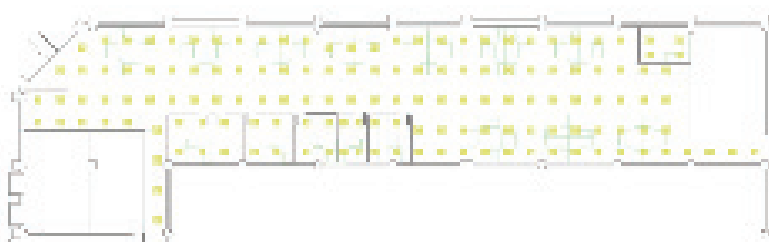
In this application the combination of all DALI devices (e.g. Sensors & LED Drivers) exceeds the 250mA allowed. Using a DALI Repeater a further 250mA can be added to the system, without the need for additional Routers.

Typical Layout

Router

Repeater

DALI line

Note: This solution does not provide additional DALI addresses. The DALI limit of 64 addresses still applies.

- Fully scalable solutions, from a single office to the whole building
- Control of multiple load types
- Integration with Building Management/ Audio Visual Systems
- Energy Monitoring and Maintenance
- Blind Control
- Co-operative with Presence / Absence Detection

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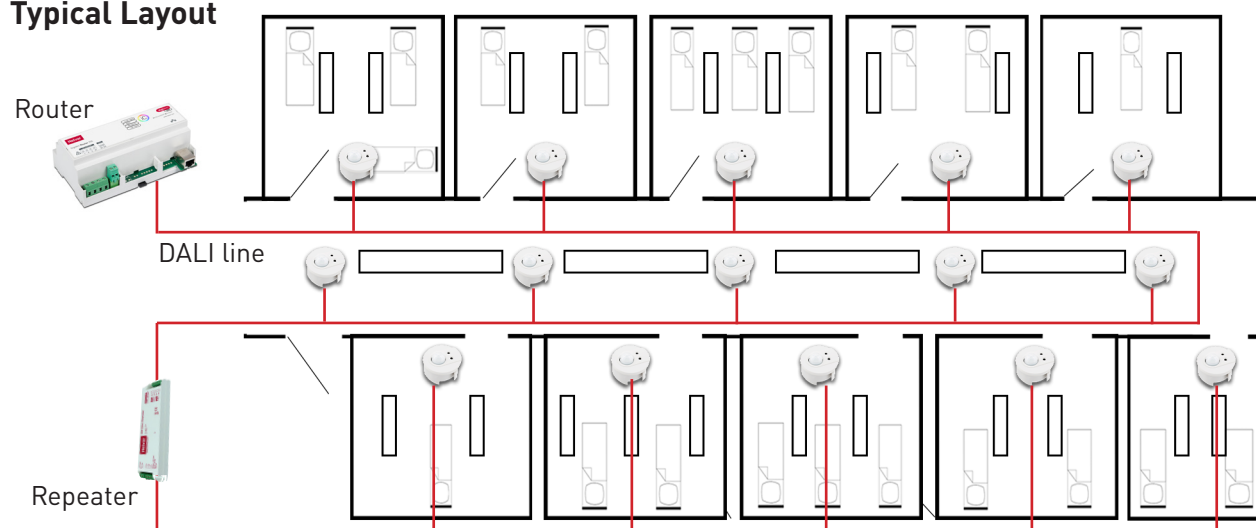*freedom in lighting*

HEALTHCARE

The system is required to provide control to various types of area such as operating theatres, patient rooms, corridors and nurse stations.

The main client concern is the use of the system by various stakeholders and their specific needs:
- Patient: Requires control of their individual environment at any time of day or night to meet their own needs without being an irritation to other room occupants.
- Nurse/Doctor: Needs to temporarily "take control" of the patients environment to carry out routine or critical tasks.
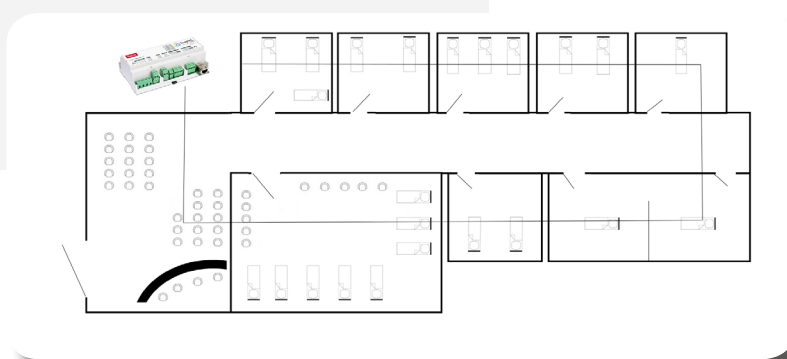
In this application the overall DALI cable length exceeds the 300m allowed. Using a DALI Repeater a further 300m can be added to the system, without the need for additional Routers.

Typical Layout

Router

DALI line

Repeater

Note: This solution does not provide additional DALI addresses. The DALI limit of 64 addresses still applies.

- Fully scalable solutions, from a single bed to the whole building
- Simple control for patient management
- Task lighting for medical personnel
- Automated control for energy saving
- Integration with Building Management Systems
- Energy management and control

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freedom in lighting

KEY FEATURES

- Extends the maximum DALI cable length from 300m to 600m
- Provides 250mA current at the DALI-OUT side
- Messages are unfiltered
- No isolation between DALI-IN and DALI-OUT. Both are isolated from the mains input
- Click-on strain relief for standalone installation (included)

TECHNICAL DATA

Electrical data
Supply: 85 VAC - 264 VAC, 48 Hz - 62 Hz
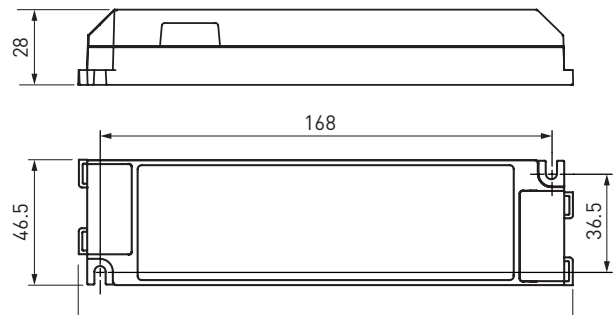Current consumption: 100 mA
External protection: 6 A MCB maximum

DALI
DALI address: none
DALI consumption: 2 mA (DALI-in side)
DALI cable: 0.5 mm^2 - 1.5 mm^2
DALI-out current: 250 mA

Mechanical data
Dimensions: 46.5 mm x 184 mm x 28 mm
       With strain relief:
       46.5 mm x 225 mm x 28 mm
Weight: 150 g
Mounting: Cable clamps with strain relief for standalone installation
IP code: IP20

DIMENSIONS

28

168

46.5

36.5

With strain relief (included)

36.5

225