

The Digidim uses an Ethernet connection (10/100 Mb/s) as a network backbone to seamlessly combine DIGIDIM/DALI, SDIM and DMX networks.

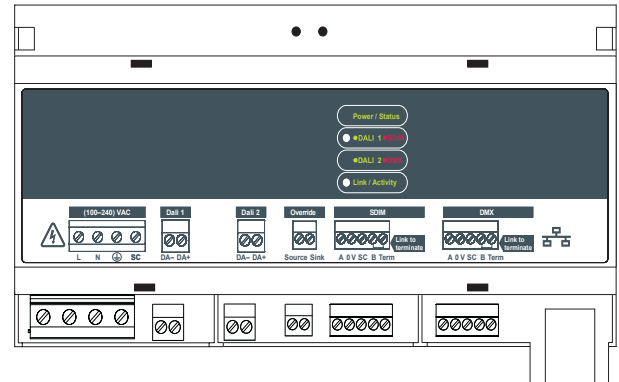
Basic functionality is available out of the box without any programming. Digidim software allows for advanced configuration and functional programming of the router. Dimming rate 0-100%.

The system provides energy-saving features via presence detection and daylight harvesting. Further automation can be achieved through scheduled events.

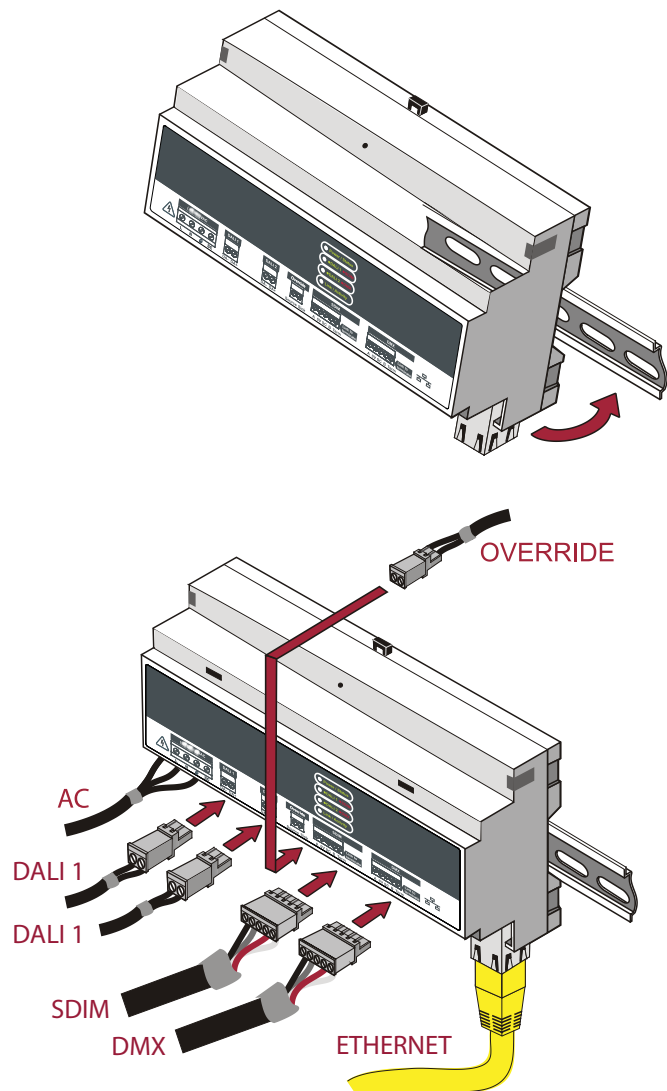
A PC can be connected to the system for diagnostics and logging purposes if required, but there is no need for PC control in daily operation, as all data is stored within the system itself. The elimination of a central controller ensures that no single point of failure can cause a total system shutdown.

Key Features

- Support for 128 DALI devices (64 DALI devices on each DALI subnet).
- Built-in real-time clock.
- Can be networked together to form large scalable systems.
- Provides local as well as central control if required.
- Integration with other building systems.
- Universal supply input.



Installation



Technical Data

Connections

Mains cable:	Solid core up to 4 mm ² Stranded up to 2.5 mm ²
DALI cable:	0.5 mm ² – 2.5 mm ² Max. length: 300 m @ 1.5 mm ²
Override (OVR):	Source: 3 V, 50 mA Sink: max. 28 V, 50 mA
SDIM/DMX:	Low-loss RS485 Type (multistranded, twisted and shielded), 3 or 4 cores + screen 0.22 mm ² – 1.5 mm ² Max. length: 1 km
Ethernet:	1 × RJ45 10/100 Mb/s, Cat 5E up to 100 m (Auto MDI/MDI-X crossover)

Power supply

Mains supply:	100 VAC – 240 VAC (nominal) 45 Hz – 65 Hz
Power consumption:	23 Watt (DALI subnet fully loaded)
Power circuit protection:	External protection max. 6 A. Earth mandatory, Overcurrent, Short current, Over voltage, Over temperature.
Output current:	12VDC Constant Voltage
Current Range:	0 - 10 A.
Working temperature:	-40°C to +90 °C

DALI output supply

DALI-OUT current:	2 × 250 mA (current limited)
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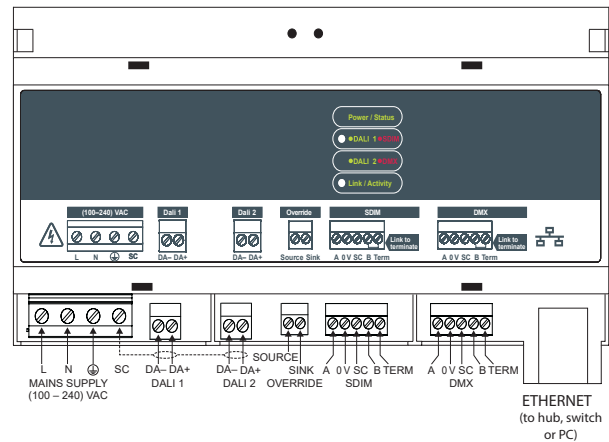
Mechanical data

Dimensions:	9U – 160 mm × 100 mm × 58 mm
Weight:	260 g
Mounting:	DIN Rail. Keep mains and DALI wiring separate from Ethernet cable.
IP code:	IP30 (IP00 at connectors)
Operating and storage conditions	
Relative humidity:	Max. 90 %, noncondensing

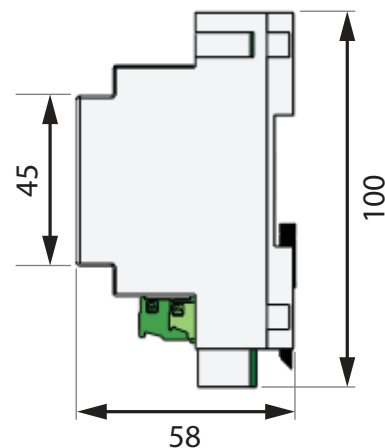
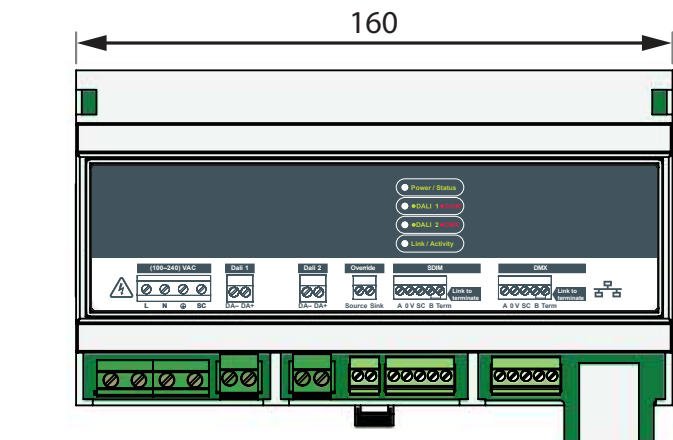
Conformity and standards

DALI data transfer:	DALI standard IEC 62386
EMC emission:	EN 55022 Class A
EMC immunity:	EN 55024
Safety:	EN 60950

Inputs/Outputs



Dimensions (mm)



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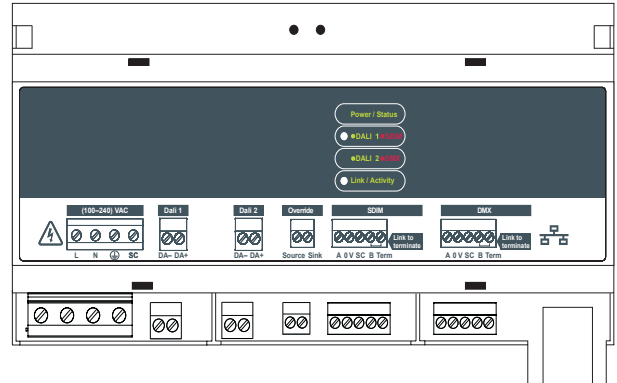
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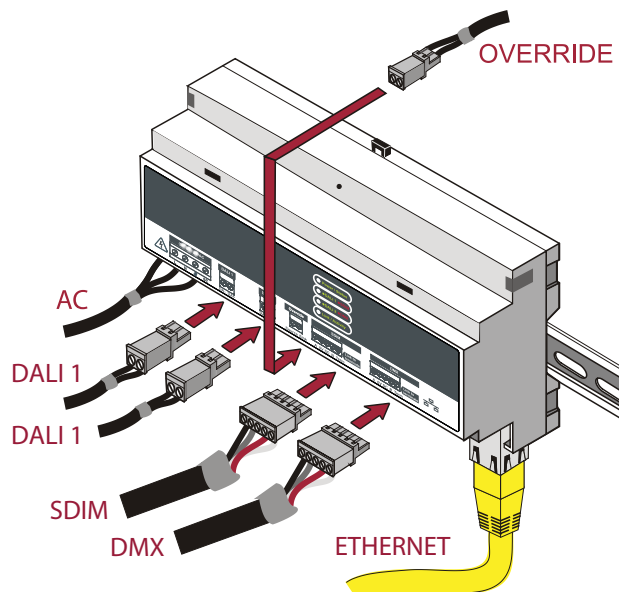
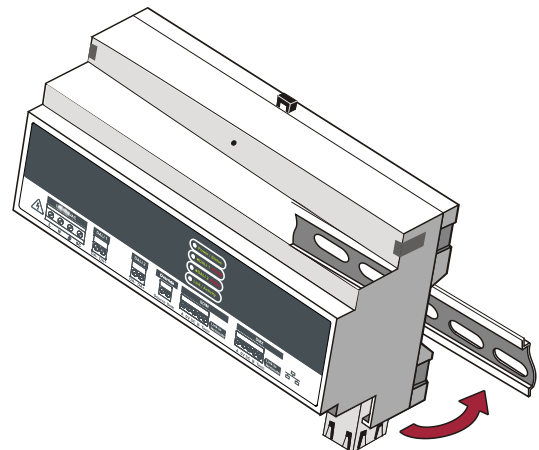
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5.3.6.2



5.3.8

Installation



Technical Data

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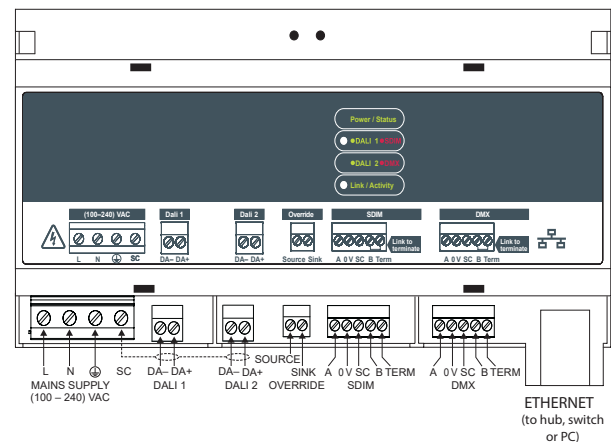
Operating and storage conditions

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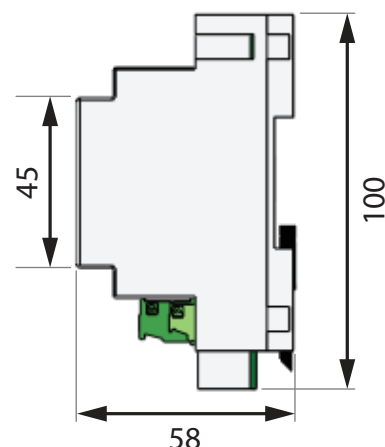
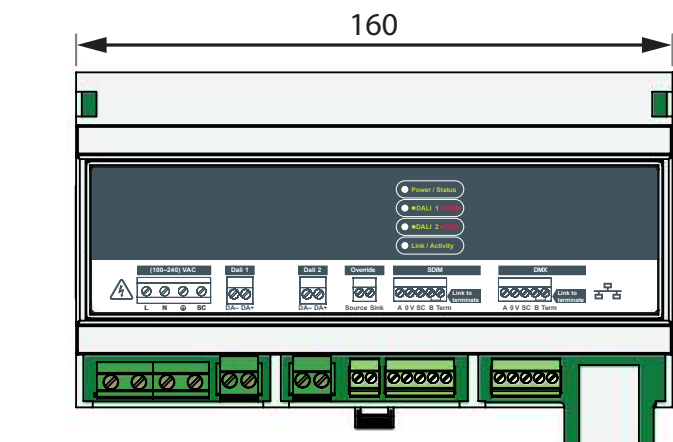
Conformity and standards

DALI data transfer:	DALI standard IEC 62386
EMC emission:	EN 55022 Class A
EMC immunity:	EN 55024
Safety:	EN 60950

Inputs/Outputs



Dimensions (mm)



Light Sensor

The Light Sensor, when used in conjunction with a Lighting Router based controls system, can provide energy savings by adjusting light levels based on the available daylight.

Mount the Light Sensor outdoors to monitor the level of daylight. For instance, bright sunlight will raise the overall light level in the rooms of a building. The sensor will detect this, and the system will reduce the energy levels supplied to the lamps. If the day then becomes overcast, the system will respond to the lower levels of ambient light by increasing the energy provided to the lamps. By profiling the building (measuring the daylight contribution per room), the system can be used to maintain an approximate constant light level, and thereby reduce energy use.

The Light Sensor is for mounting outdoors. The unit head assembly is waterproof when correctly installed and mounted vertically, and can tolerate a wide range of operating temperatures and conditions.

Key Features

- Open loop light control
- Light range of 1 lx – 100 000 lx
- Simple mounting
- Easy connection to Helvar router system

Incident Light (lx)	Light Level Output Value	Equivalent To
≤ 1	0	Darkness
2	11	
5	26	
10	38	Twilight
20	49	
50	65	
100	76	Dark day
200	87	
500	102	
1000	114	Overcast day
2000	125	
5000	140	
10 000	152	Full daylight
20 000	163	
50 000	178	
100 000	190	Bright sunlight

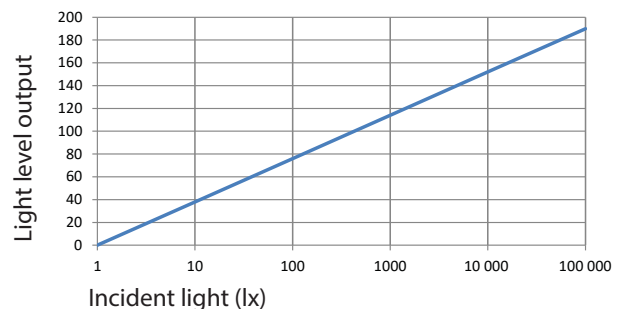


Installation Notes

- The unit is intended for wall mounting.
- Isolate the mains supply before installation.
- Cabling must be 230 VAC mains rated.
- Do not mount sensor in direct line of artificial light sources, e.g. lamps, uplighters.
- The unit must be mounted vertically, i.e. with the clear Sensor Head Cover pointing upwards. Any convenient surface may be used as long as the sensor element has a reasonably unrestricted view of the sky.
- To avoid the possible risk of lightning strikes, never install the external light sensor at the highest point on a building.

Light level output

The external light sensor is calibrated to provide a scaled light level output of 0 to 200 covering the full range of daylight. The sensitivity of the external light sensor is factory-set, and no adjustment is required.



Light sensing angle

Vertical plane: Unrestricted viewing angle of 170°.

Horizontal plane: 360° viewing angle.



Technical Data

Connections

DALI

Wire size: 1.0 mm² – 2.5 mm²
2-core solid, flexible or stranded
Max. length: 300 m
@ 2.5 mm²
(part of DALI subnet)

Connector type:

Screw terminals:
N: DALI +
L0: DALI –
L1: No connection

Cable rating:

All cables must be mains rated.

Power supply

DALI power supply:

13 V – 22 V

DALI consumption:

10 mA

Sensor

Sensor element:

Photodiode matched to human eye response.

Light sensing angle:

When mounted vertically:
– 85° from vertical
– Horizontal plane: 360°

Working light range:

1 lx – 100 000 lx

Light level reading output:

0–200

Mounting

Mounting angle:

Vertical (clear sensor head at top)

Mounting points:

2 × M4 (No. 8 woodscrew)
For fixing centres, see diagram.

Mechanical data

Dimensions:

148 mm × 82 mm × 87 mm

Materials

Base & mounting bracket:

Black ABS

Socket & sensor accessory:

Black glass-filled nylon

Sensor cover:

Toughened acrylic (UV stable)

Weight:

250 g

IP code:

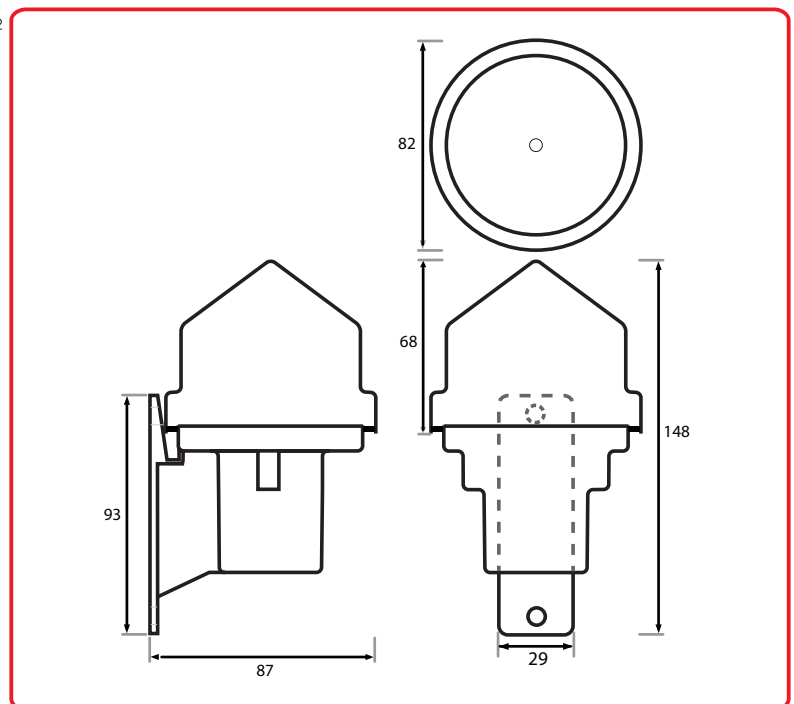
IP65

Operating conditions

Relative humidity:

Max. 90 %, noncondensing

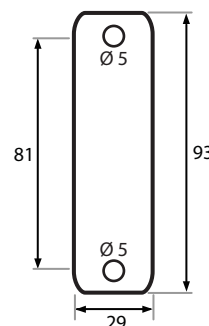
Dimensions (mm)



Fixing centre locations

(Dimensions in mm)

5.3.6.1 , 5.3.6.4



Conformity and standards

EMC emission:

EN 55015

EMC immunity:

EN 61547

Safety:

EN 60950

Environment:

Complies with WEEE and RoHS directives.

คุณลักษณะ

1. สามารถหรี่ไฟได้ (Dimming 0-100%)
2. ควบคุมการทำงานผ่านระบบคอมพิวเตอร์
(Microprocessor Control)
3. ตั้งเวลาเปิด-ปิด หรือ เปิด-ปิดโดยตรงได้ (Manual)
4. ควบคุมผ่าน Network
5. อุปกรณ์สามารถทำงานพร้อมกันหรือ
สามารถแยกการควบคุมกันได้ (Auto/Normal)
6. ควบคุมการเปิด-ปิดผ่านแสงได้ (Light Sensor)
7. การเชื่อมต่อเป็นแบบ DMX Low-Loss RS485 Type/
Ethernet 1xRJ45 10/100 Mbps
8. ระบบสามารถต่อสัญญาณกับ DMX, DALI, S-Dim ได้
9. ระบบรองรับการเชื่อมต่อกับ BMS
10. การติดตั้งเป็นแบบ DIN RAIL
11. กำลังไฟขาเข้า 90-264 VAC 50/60Hz
12. พลังงานขาออก 120 วัตต์
13. กระแสขาออก 0 ถึง 10 แอมป์
14. แรงดันขาออก 12VDC คงที่
15. อุณหภูมิในการทำงาน -40 ถึง +90 องศา
16. อุปกรณ์ใช้ร่วมกับ Switching Power Supply 12/24 VDC
17. อุปกรณ์มีระบบป้องกัน Over current, Short current,
Over voltage, Over temperature

