329 DALI External Light Sensor

The 329 DALI External Light Sensor is a wall mounted outdoor sensor designed to monitor daylight levels. Based on the sensor data, Helvar Application Controller can adjust the light levels in chosen spaces inside the building in accordance to brightness of the day. By profiling the building (measuring the daylight contribution per room), the system can be used to maintain an approximate constant light level. This will in long term create cost-savings as less energy is required for lighting during a bright day.

Since the product is designed to be mounted outside, it is waterproof and can tolerate a wide range of operating temperatures and conditions.
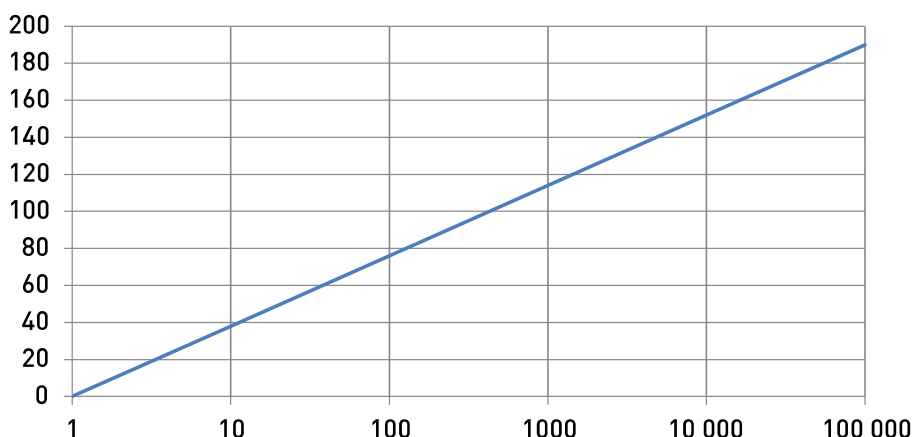
Key Features

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

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.
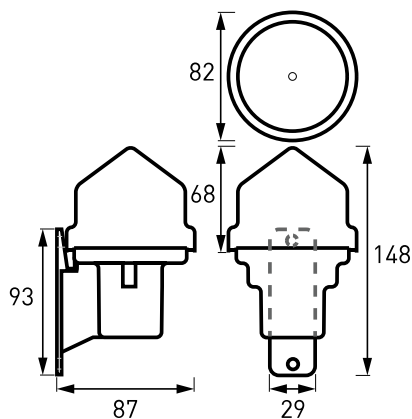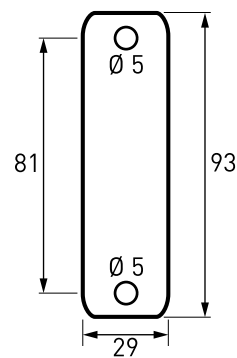
Detection

Light Sensing Angle

85º | 85º

Vertical plane: Unrestricted viewing angle of 170°

Horizontal plane: 360° viewing angle

Dimensions (mm)

82

68

148

93

87

29

Fixing Centre Locations (mm)

Ø 5

81

93

Ø 5

29

Technical Data

Connections

DALI:	2-core solid, flexible or stranded
	Wire section: 1.0–2.5 mm², 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.

Electrical Data

DALI supply input:	13–22 V
DALI consumption:	10 mA Max

Sensor

Light sensor:	Photodiode matched to human eye response.
Illuminance:	1 lx to 100 000 lx

Operating and storage conditions

Ambient temperature:	-35 °C to +70 °C
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	-20 °C to +70 °C

Mechanical data

Dimensions:	148 × 82 × 87 mm
Mounting angle:	Vertical (clear sensor head at top)
Mounting points:	2 × M4 (No. 8 woodscrew) For fixing centres, see diagram.
Material:	Base & mounting bracket: Black ABS
	Socket and sensor accessory: Black glass-filled nylon
	Sensor cover: Toughened acrylic (UV stable)
Weight:	250 g
IP code:	IP65

Conformity and standards

Conformity:	CE UKCA
EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 61347-2-11
Environment:	Complies with WEEE, RoHS and REACH directives.