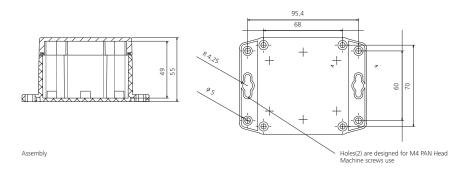




DALI Ambient Sensor Outdoor is a sensor of illuminance and correlated colour temperature that uses DALI bus for biasing and the communication. Besides of the sensing features it is also capable of regulation of variously addressed Tunable White luminaires. DALI Ambient Sensor can therefore act as simple sensor, whose data are processed by another device on DALI bus or it can act as control device for automatic control of illuminance and correlated colour temperature. DALI Ambient Sensor Outdoor is suitable for outdoor application (IP 65).

DALI Ambient Sensor Outdoor

Dimensions



Parameter	Ranges of values	Settable by	Description
Address	1 to 64	Any DALI configurator	Address of the sensor
Illuminance level	100-30,000 lx	-	Measured value of illuminance (read only)
CCT level	2500-8000 K	-	Measured value of CCT (read only)
Status	-	-	Status of the sensor (see below)
Timing	5-300 ms	DALI/USB Bridge	Parameter defines period between two subsequent control commands (lower value means faster regulation)
Final illuminance level	100-30,000 lx	DALI/USB Bridge	Desired illuminance value
Final CCT level	2500-8000 K	DALI/USB Bridge	Desired CCT value
Illuminance regulation	Active / Non-active	DALI/USB Bridge	Activates or deactivates the illuminance regulation
CCT regulation	Active / Non-active	DALI/USB Bridge	Activates or deactivates the CCT regulation
Regulation mode	Cold/Warm, Brightness/ CCT, DALI type 8	DALI/USB Bridge	Defines the addressing of TW luminaires, it is possible to use more addressing types concurrently
Warm channel group address	1- 6	DALI/USB Bridge	Define group address for warm channel control
Cold channel group address	1-16	DALI/USB Bridge	Define group address for cold channel control
Brightness channel group address	1-16	DALI/USB Bridge	Define group address for brightness channel control
CCT channel group address	1- 6	DALI/USB Bridge	Define group address for CCT channel control
DALI type 8 group address	1-16	DALI/USB Bridge	Define group address for DALI type 8 control

Key features

- Biasing from DALI bus, input voltage range is compatible with DALI standard
- Illuminance and CCT sensing
- Passive / Active mode offers direct regulation of Tunable White luminaires
- Configuration via DALI bus
- Installation ceiling surfaced

Function

DALI Ambient Sensor senses the light conditions in the area – illuminance in luxes and correlated colour temperature (CCT) in Kelvins. The measurement runs automatically with automatic range switching. The range of measured illuminance is from 100 lx to 30 000 lx. The range of CCT measurement is from 2 500 K to 8 000 K. For the communication the sensor uses DALI protocol typical for lighting installations. The sensor reacts on its address that is possible to set using any standard DALI configuration tool. Other parameters of the sensor can be set only using DALI/ USB Bridge and its software tool.

By default the sensor is in passive mode therefore any regulation is disabled – it is possible to read-out measured values only. The basic parameters for the regulation are final values of illuminance and CCT. Then it is necessary to define the type of regulated Tunable White luminaires. DALI Ambient Sensor can control the luminaires with two channels of cold/warm type; two channels of brightness/ CCT type and DALI type 8 luminaires. For each channels it is possible to set its DALI group address independently (cold channel, warm channel, brightness channel, CCT channel, DALI type 8). The sensor can control all types of Tunable White luminaires in parallel. The regulation of illuminance and CCT can be activated or deactivated independently or it can also run in parallel (concurrent regulation of illuminance and CCT). The parameters of the DALI Ambient Sensor and its properties are summarized in the table below.

Connections

Cable Wires AWG 24 (0.5 mm²)

Power

Voltage at DALI input 12-25 V DC Input current < 9 mA

Mechanical data

IP Rating IP65 Weight 214 g

Dimensions 82 x 112 x 55 mm

Operating conditions

Ambient temp. range -20 °C - +60 °C Relative humidity 85 % (non-condensing) Storage temp. range -40 °C - +70 °C