# Installation Manual DA-xD100 / DA-xD100-IR (PD100, MD100) EAE DALI Occupancy Sensors





Figure 1: xD100 Surface Mount

Figure 2: xD100 Flush Mount

# Description

- xD100 DALI Occupancy Sensor is ideal for indoor areas such as offices of any size, classrooms, conference / meeting rooms, parking areas, warehouses and sport halls.
- Optional IR receiver for virtual push button control via remote controllers.
- Device can be configured on site to be used with most of the available remote controllers. Custom remote controller design with up to 12 buttons can be ordered on request
- Available in two models
  - PD100 (suitable for precise presence detection)
  - MD100 (suitable for wider range movement detection)
- Available in flush mounted and surface mounted versions
- Measures the ambient brightness between 5 2000 lux
- Defined test and calibration commands for easy installation
- RGB LED for localization, movement and IR command indications.
- Additionally, RGB LED can be used for custom defined feedbacks
- Power supplied via DALI bus
- Compatible with relative DALI-2 standards
  - Control device (IEC 62386-103 v2.0)
  - Occupancy sensor (IEC 62386-303 v2.1)
  - Light sensor (IEC 62386-304 v2.0)
  - Feedback (IEC 62386-332)
  - Push button (IEC 62386-301 v2.0 only on IR models)

# **Technical Data**

T	10.20	
Type of protection	IP 20	EN 60529
Safety class	II	EN 61140
Power supply	Voltage	10V 22V DC
	Bus current drawn	< 3 mA (guaranteed by design)
	Start-up time	< 0.5 s
Application Area		Interior rooms
Sensor Type		Passive infrared
Installation	Location	Ceiling
	Recommended height	2,5m - 5m
Detection	Diameter	9m movement detection (MD100)
	(at height of 2,5m)	6m presence detection (PD100)
	Angle	360°
	Light level	5 – 2000 lux
IR Receiver	Protocol	RC5, NEC
	Frequency	36kHz
	Virtual push button	12
	instance count	
Temperature range	Ambient	-5° C + 45° C
	Storage	-25° C + 55° C
Dimensions	Flush mount	Dia: 75 mm Height: 38.4 mm
	Surface mount	Dia: 96 mm Height: 51.6 mm
Box	Plastic, polycarbonate, color white	
CE	In accordance with the EMC guideline and low voltage directives	

# Operation and Display

#### -Device Identification LED

Green LED lights up (inside of lens) if Device Identification is active for this device. LED color can be changed via DALI2 application controller if desired.

#### -Movement LED

Blue LED lights up (inside of lens) if any movement detected by sensor. LED color can be changed via DALI2 application controller if desired.

#### -Remote IR LED

Red LED lights up (inside of lens) if any command received by IR remote. LED color can be changed via DALI2 application controller if desired.

### **Scale Drawings**



Drawing 1: xD100 Surface Mount



# Drawing 2: xD100 Flush Mount

# Commissioning

Any DALI2 application controller can be used to configure this device.

Installation and commissioning of device may only be implemented by trained electricians. The relevant standards, directives, regulations and instructions must be observed when planning and implementing the electrical installation.

-When connecting the device make sure that the device is isolated!

-Protect the device against moisture, dirt and damage during transport, storage and operation!

-Do not operate the device out of the specified technical data which is stated. -The device may only be operated in closed enclosures (Distribution boards etc.)

#### Cleaning

If device becomes dirty, only a dry cloth can be used for cleaning. It is not suitable to use wet cloths, caustics and solvents.

