smartSWITCH 5DP 14f
Automatic switching based on presence and light level

Product description

- Motion detector for luminaire installation
- For automatic on/off switching of luminaires with electronic ballasts and LED Drivers
- „Bright-Out" function: luminaire is not switched on if there is adequate brightness
- Maximum of 1 sensor possible
- Low-profile casing (21 x 30 mm)
- For a maximum of 2 LED Drivers
- Delay time and light value for the „Bright-Out" function can be set via 2 potentiometers

→

TRIDONIC

RoHS
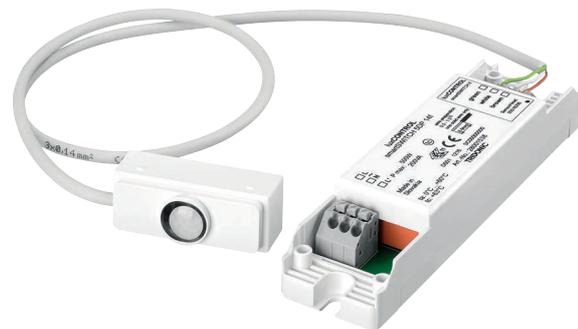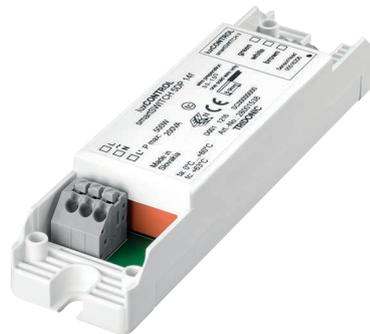
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Technical data

Rated supply voltage	220 – 240 V
Mains frequency	50 / 60 Hz
Power (output on)	0.6 W
Output, standby (output off)	0.35 W
Ambient temperature ta	0 … +60 °C
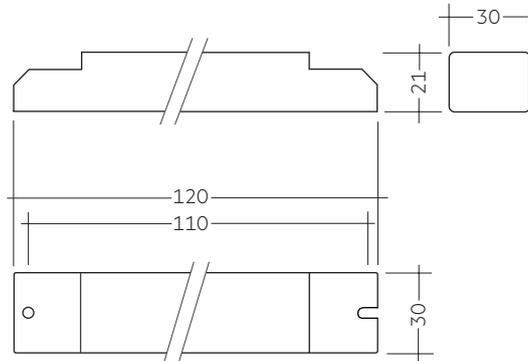
Ordering data

Type	Article number	Packaging carton	Weight per pc.
smartSWITCH 5DP 14f	**28001538**	10 pc(s).	0.057 kg

Specific technical data

Type	Inputs		Output, relay (L')			
	Max. Smart SWITCH sensors	Sensor cable length	L' (switched phase)	Max. switching output (e.g. LCA)[1]	Max. switching output [W]	Max. switching output [VA]
smart SWITCH 5DP 14f	1	0,54 m	220 – 240 V	2	500 W	200 VA

[1] Due to the inrush current, not more than 2 Driver with a total power of 500 W can be connected to the smartSWITCH controller.

ACCES-SORIES
5DPI 14f Mounting Kit

Product description

- Mounting frame for attaching all 5DP 14f sensor directly to the luminaire housing
- Shutter for preventing movement detection in one direction

Ordering data

Type	Article number	Packaging carton	Weight per pc.
5DPI 14f mounting kit	**28001558**	100 pc(s).	0.004 kg
5DPI 14f mounting kit black	**28001575**	100 pc(s).	0.004 kg

smartSWITCH Sensor
cable entry point on the side

2m 5m 15m
5s 30m off
T-delay   Lux
Bright out

16,4

44,4

12,8

Ø13,9   1,9   3
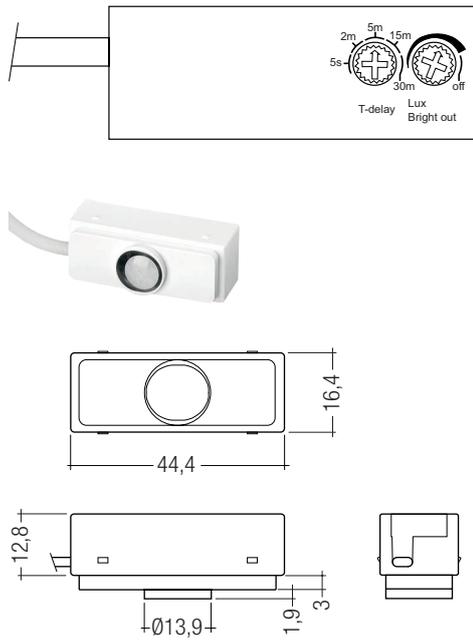
Ultra-compact luminaire mounted sensor for ambient light and detection of movement.

Wiring diagram

L
N

0.54 m

☐ L
☐ N   Smart SWITCH
☐ L'

L'

☐ ⏚   z.B. PC PRO T5
☐ ≈   or
☐ ≈   TALEXXconverter

☐ ⏚   z.B. PC PRO T5
☐ ≈   or
☐ ≈   TALEXXconverter

Glow-wire test
according to EN 61347-1 passed.

Mounting variants luminaire housing:

Size of the sheet: 0.8 – 1.8 mm

1,5 – 2,5

Ø14,1$^{+0,2}_{0}$

Size of the sheet: 0.8 – 3.0 mm

3,3 – 5,5

41,1$^{+0,2}_{0}$

14,1$^{+0,2}_{0}$

R1,9$^{0}_{-0,2}$

Mounting in luminaire housing with Mounting Kit:

Size of the sheet: 0.8 – 2.0 mm

Dimension drawing for needed
mounting opening

R0.9

$\varnothing 21.2^{+0.1}_{-0.0}$

1.8 ± 0.05

10.65 ± 0.05

Shutter support ring has to be snapped
into the shutter support

0.8

Thickness metal sheet 0.8 – 2.0 mm

Option shutter:
has to be snapped
into the shutter support ring
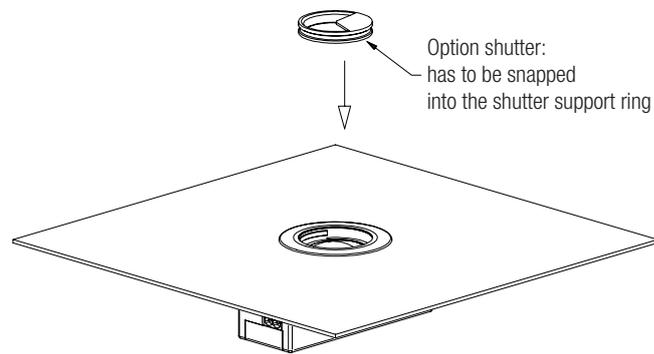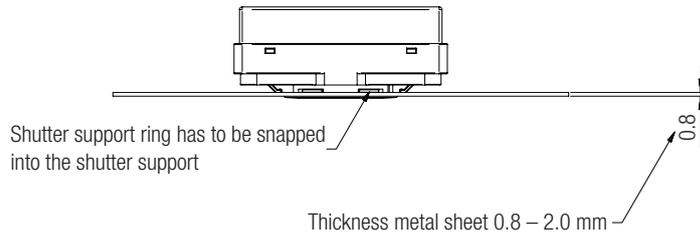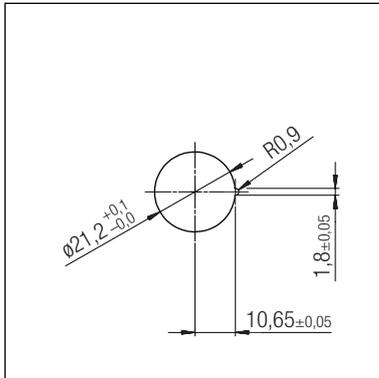
Mounting Kit mounting
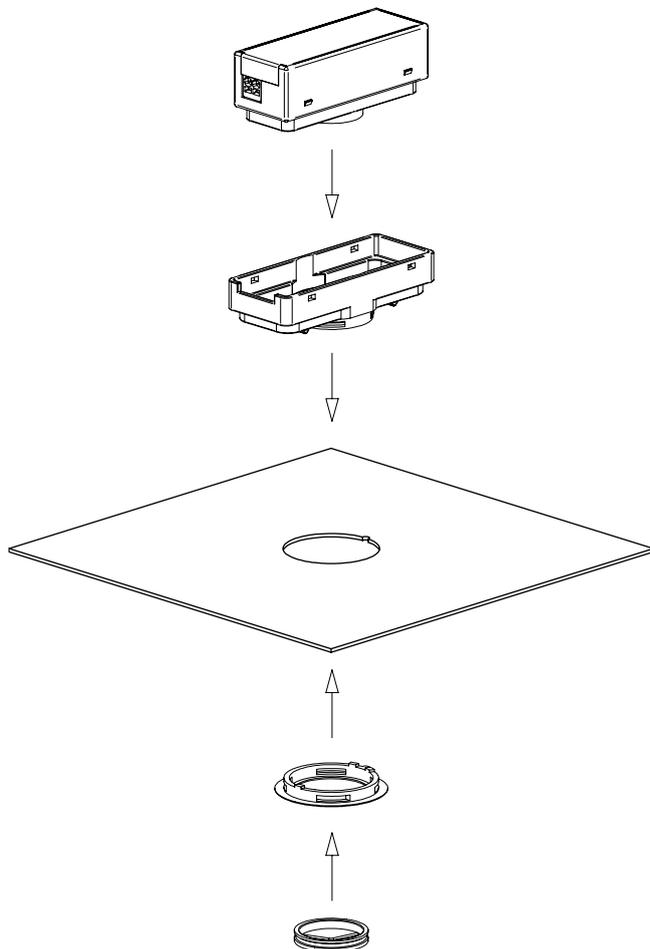
Mounting Kit Shutter

Area which is masked by the shutter.

120°

Masked area
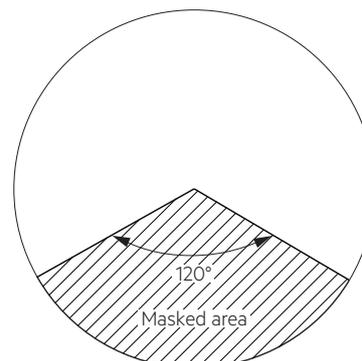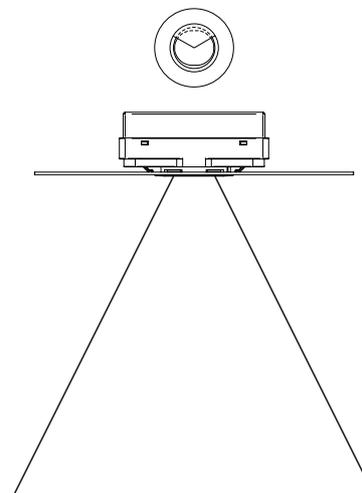
Light level recognition area

Sensor alignment
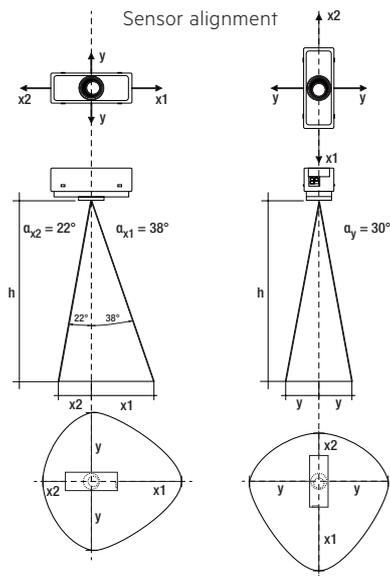
h *	x1	x2	y	d
1.7 m	1.3 m	0.7 m	1.0 m	3.0 m
2.0 m	1.6 m	0.8 m	1.2 m	3.6 m
2.3 m	1.8 m	0.9 m	1.3 m	4.1 m
2.5 m	2.0 m	1.0 m	1.4 m	4.5 m
2.7 m	2.1 m	1.1 m	1.6 m	4.9 m
3.0 m	2.3 m	1.2 m	1.7 m	5.4 m
3.5 m	2.7 m	1.4 m	2.0 m	6.3 m
4.0 m	3.1 m	1.6 m	2.3 m	7.2 m

* The recommended maximum room height for office applications is 3 m and for corridor applications for example 4 m. Up to 2 m mounting height presence is detected and over 2 m motion is detected.

Calculation of the diameter (light area):
$x1 = \tan(\alpha_{x1}) \times h$
$x2 = \tan(\alpha_{x2}) \times h$
$y = \tan(\alpha_y) \times h$

Calculation of the diameter (motion area):
$d = 2 \times \tan(0{,}5 \times \alpha) \times h$

Example for light and motion detection area at height of 1.7 m:
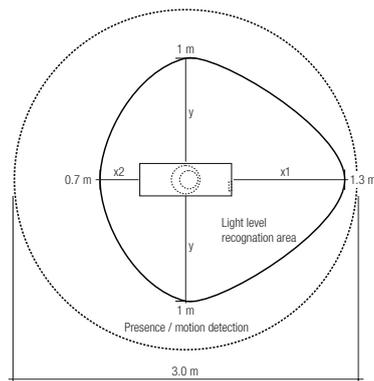
Adjustments

Potentiometer times = 5s, 2m, 5m, 15m, 30m, default = 5 s
(Note: Only discrete steps are selectable, no intermediate values)
Potentiometer lux = 50 – 500 lx, default = off

Bright out:
Bright out will be activate if postilion off is not selected.

No adjustable parameters:
Switch OFF light level: 250 % of the adjustable switch ON light level
Bright out delay time: 10 min.
Power up behavior: When power up, the smartSWITCH will switch ON

T-delay   Lux
Bright out
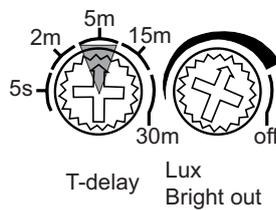
In the example above the 5 minute range is selected.

Presence / motion detection