

net4more Sensor 5DPI 14 un:c
Multi-sensor for net4more system

Product description

- Component of the net4more system
- With ambient light dependent control and motion detection
- Can be remote controlled
- Lighting control and motion detection can be deactivated
- Individual adjustment of the parameters with configuration software
- Multi-master compatible: Multiple control modules are possible in a net4more system
- Power supply via un:c
- net4more articles are part of the net4more toolbox consisting of hardware and software and can be ordered with the system via your local sales team
- 5-year guarantee



Standards, page 5

Fig. 1

Fig. 2





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Technical data

Supply via	un:c bus
Max. current draw from un:c	40 mA
Typ. current draw from un:c	20 mA
tc point	65 °C
Ambient temperature ta max.	0 ... +60 °C
Storage temperature	-20 ... +65 °C
Max. mounting height	5 m
Type of protection	IP20

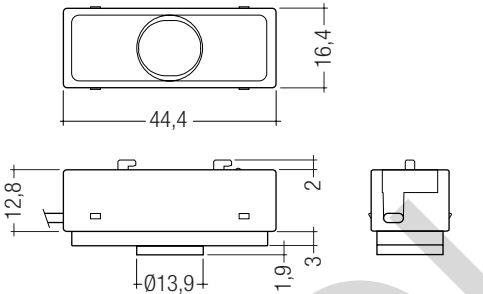


Fig. 1

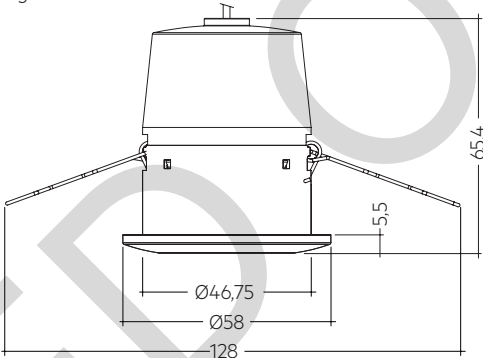


Fig. 2

Ordering data

Type	Article number	Figure	Packaging, carton	Weight per pc.
net4more Sensor 5DPI 14f un:c Luminaire installation	28001540	1	10 pc(s).	0.016 kg
net4more Sensor 5DPI 14rc un:c Ceiling installation	28001539	2	10 pc(s).	0.042 kg

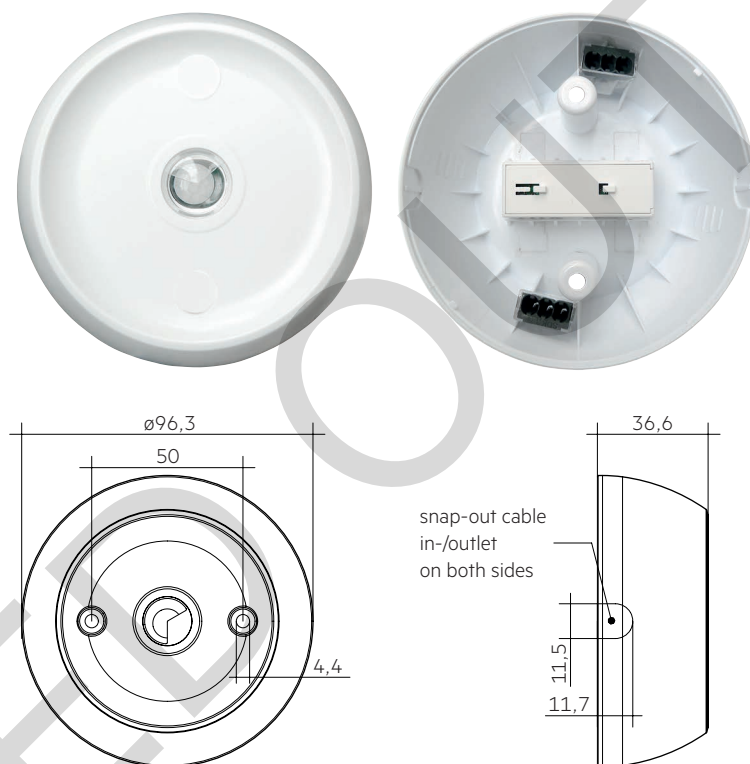
Specific technical data

Type	Detection					
	Cable length	Ø of detection range, mounted at a height of 2.5 m	Swivel design	Detection angle	Light measurement at the sensor head ^①	Infrared control range
net4more Sensor 5DPI 14f un:c	400 mm	4.5 m	no	84°	10 – 650 lx	5 m
net4more Sensor 5DPI 14rc un:c	350 mm	4.5 m	no	84°	10 – 650 lx	5 m

^① The measured value at the sensor head corresponds to approx. 15 to 2,000 lux on the surface measured.

Product description

- Mounting frame for all 5DP 14f sensors allowing direct mounting to the ceiling
- Easy „click in“ installation of the sensor
- IP20
- Casing: plastic, white
- UV stabilized plastic
- Optional shutter for reduction of movement detection area allowing to decrease the movement detection area from 360° to 240°
- Mounting kit with screws and decorative plugs
- 0.5 mm wiring for the sensor
- Two 3 x 1.5 mm² clamps with cable management (2 entry points on oppsite sides)
- Glow wire test with 750 °C according to EN 61347-1



Ordering data

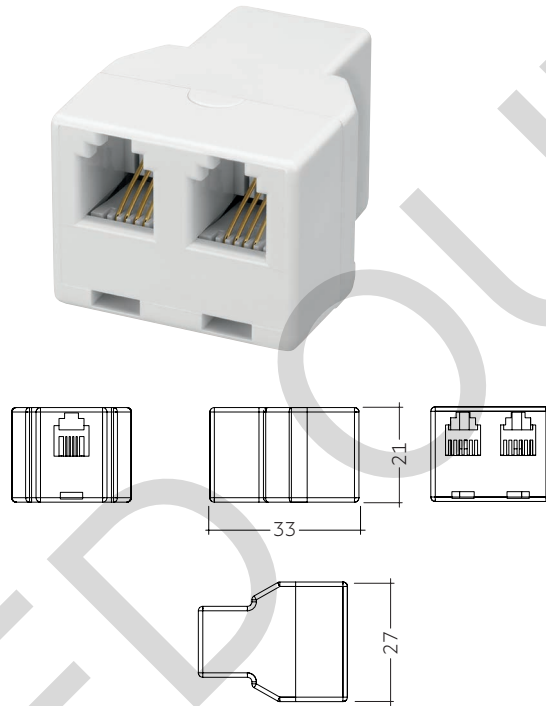
Type	Article number	Packaging carton	Weight per pc.
ACU Sensor Housing 14rs IP20	28001872	57 pc(s).	0.054 kg

ACCES-
SORIES

net4more 3way Splitter un:c

Product description

- un:c 3-way-splitter
- For wiring multiple components



Ordering data

Type	Article number	Packaging carton	Weight per pc.
net4more 3way Splitter un:c	28001664	100 pc(s).	0.02 kg

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
- Glow wire test with 750 °C according to EN 61347-1



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

1. Standards

EN 61347-1
EN 61347-2-11
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
UL 60730 Edition 4

1.1 Glow wire test

according to EN 61347-1 with increased temperature of 850 °C passed.

2. Common

The net4more Sensor is the ideal addition to the net4more series of products as it offers daylight-dependent lighting control, presence detection and remote control. It has been designed for the following principal applications:

- Luminaire built-in
- Individual offices
- Open-plan offices
- Training / presentation rooms
- Corridors, passageways and garages

The net4more Sensor controls a net4more group and is designed that it can be used together with the net4more components.

3. Interfaces / communication

3.1 un:c interface

Parameter	Value
Output voltage	5 V
Min. output voltage	4,2 V
Max. output voltage	5,5 V
Max. output current	400 mA
Turn off time	90 ms
Max. time to light	375 ms
Max. cable length ^①	15 m
Bus frequency	100 / 400 kHz
Devices per bus	10

① The max. cable length corresponds to the sum of all lines in un:c interface.

Details see net4more Design-In Guide.

3.2 un:c interface / RJ10

The connection between communication module and LED Driver must be done via a straight through un:c interface cable.

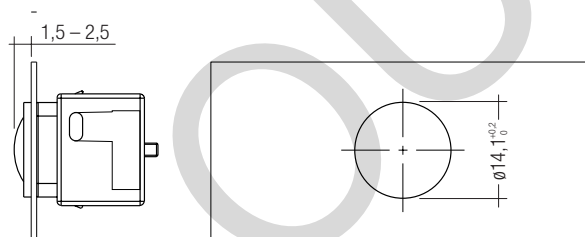
un:c (RJ10)	
pin 1	STR
pin 2	5V
pin 3	GND
pin 4	SCL

4. Installation / wiring

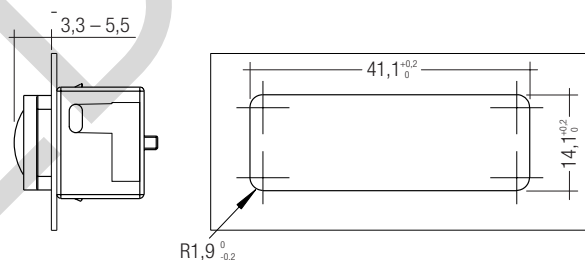
- Please ensure that the detection range of the sensor lies in the lighting area of the controlled luminaires.
- Please ensure that the detection ranges of the sensors do not overlap. This may have influence to the lighting control.
- When installed at a height other than the recommended installation height (2.5m), the presence sensor might show different characteristics. When mounted at a higher level, its sensitivity is reduced. If mounted at a lower level, its range is diminished.
- Heaters, fans, printers and copiers located in the detection zone may cause incorrect presence detection.

4.1 Mounting variants luminair installation sensor:

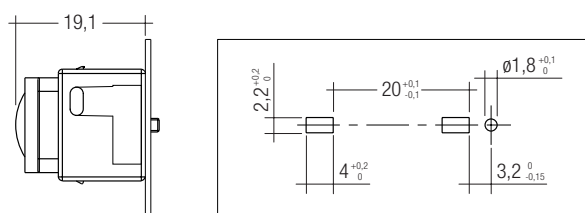
Size of the sheet: 0.8 – 1.8 mm



Size of the sheet: 0.8 – 3.0 mm



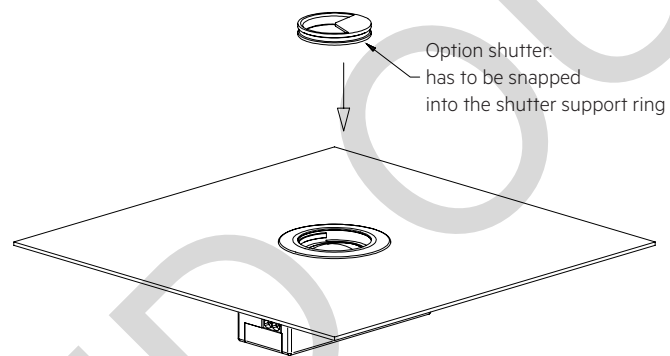
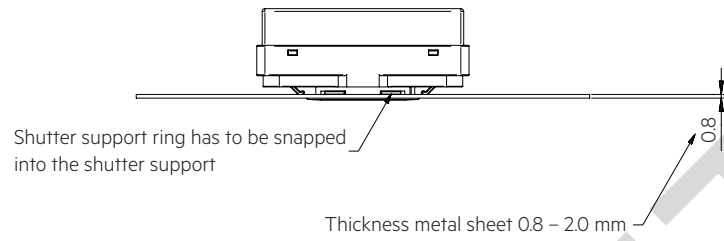
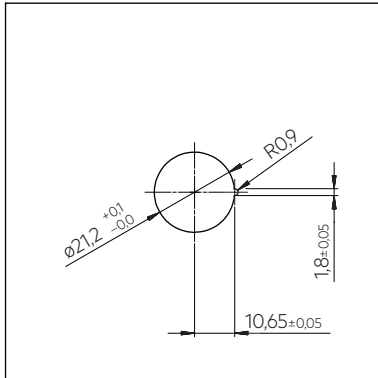
Size of the sheet: 0.6 – 0.8 mm



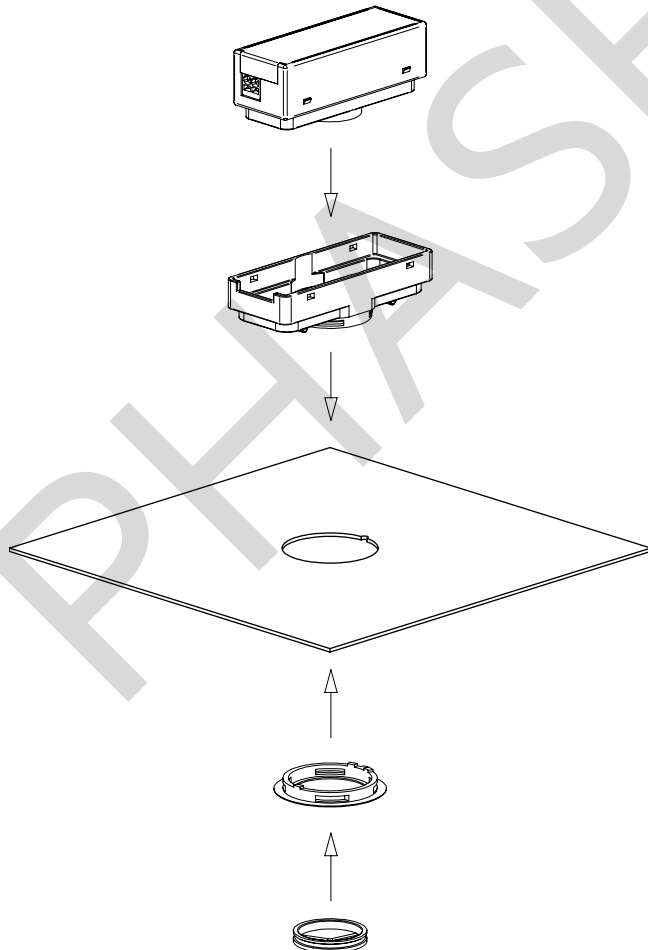
4.2 Mounting in luminair housing with Mounting Kit:

Size of the sheet: 0.8 – 2.0 mm

Dimension drawing for needed mounting opening

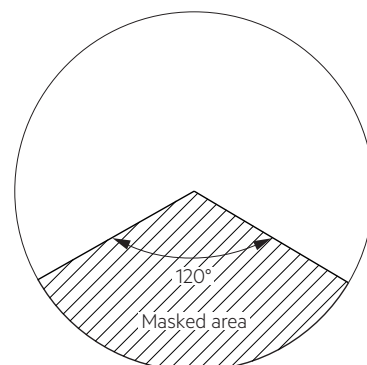
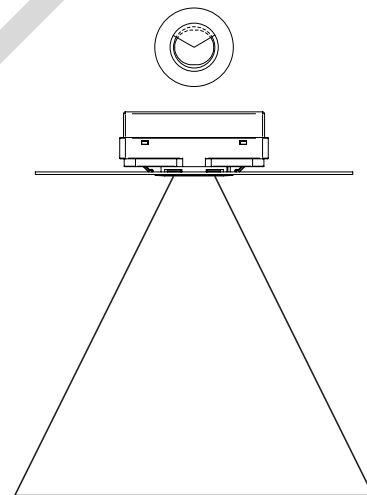


Mounting Kit mounting



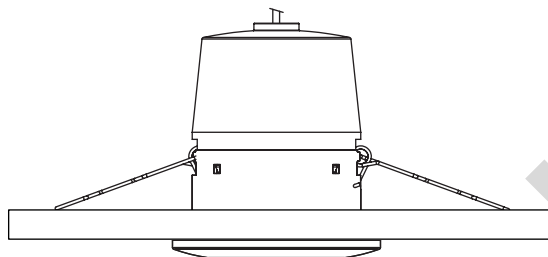
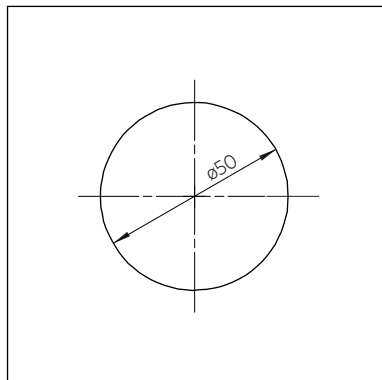
Mounting Kit Shutter

Area which is masked by the shutter.

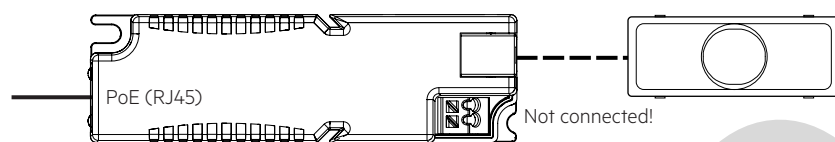


4.3 Mounting variants ceiling installation sensor:

Ceiling thickness: 1 – 55 mm



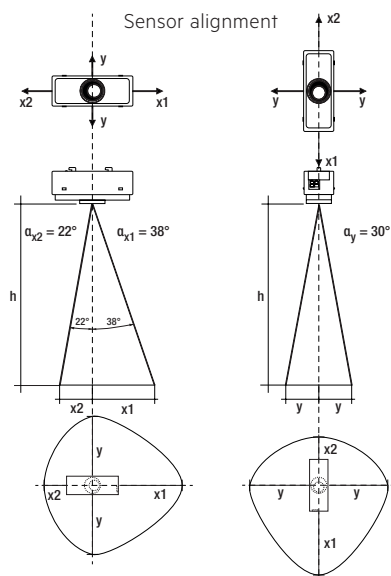
4.4 Wiring diagram



Caption:

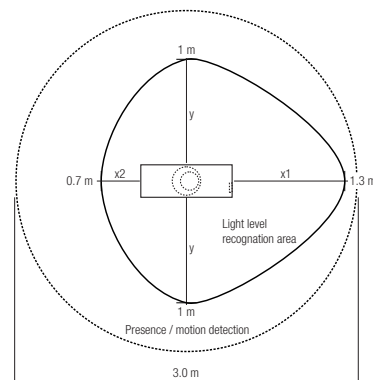
— PoE
- - - un:c

5. Light level recognition area

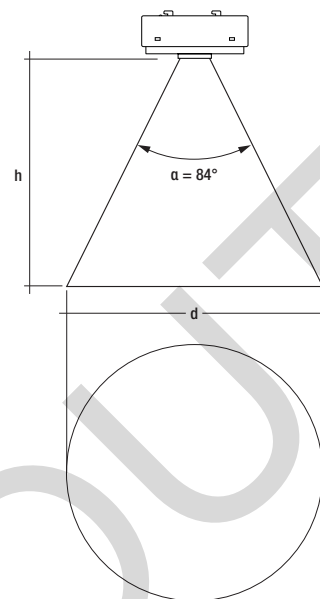


h *	x1	x2	y	d
1.7 m	1.3 m	0.7 m	1.0 m	3.0 m
2.0 m	1.6 m	0.8 m	1.2 m	3.6 m
2.3 m	1.8 m	0.9 m	1.3 m	4.1 m
2.5 m	2.0 m	1.0 m	1.4 m	4.5 m
2.7 m	2.1 m	1.1 m	1.6 m	4.9 m
3.0 m	2.3 m	1.2 m	1.7 m	5.4 m
3.5 m	2.7 m	1.4 m	2.0 m	6.3 m
4.0 m	3.1 m	1.6 m	2.3 m	7.2 m

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



5.1 Presence / motion detection



* 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):

$$\begin{aligned}x1 &= \tan(\alpha_{x1}) \times h \\x2 &= \tan(\alpha_{x2}) \times h \\y &= \tan(\alpha_y) \times h\end{aligned}$$

Calculation of the diameter (motion area):

$$d = 2 \times \tan(0.5 \times \alpha) \times h$$

6. Miscellaneous

6.1 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Life-time declarations are informative and represent no warranty claim.
No warranty if device was opened.