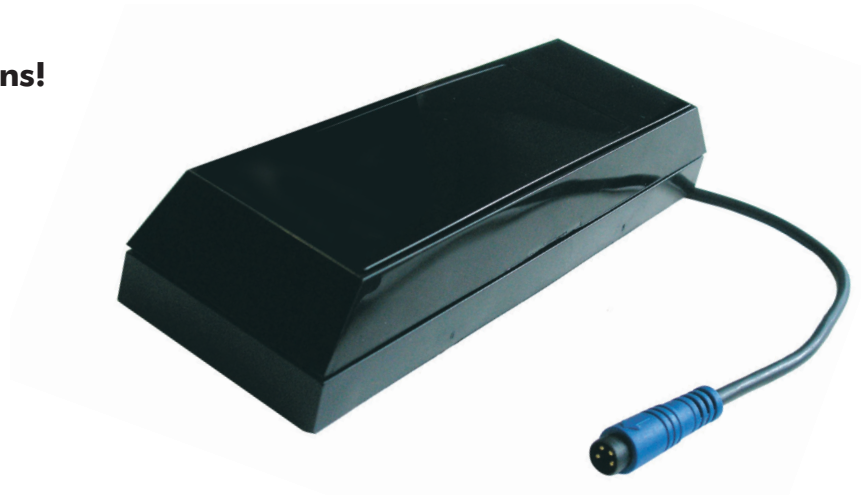# TPS product family

... copes with all lighting conditions!

PRELIMINARY

CE

Features

- Infrared sensor based on triangulation proximity technology
- Built-in signal processing
- Insensitive to variable light conditions
- Plug-and-play system
- Easy to install

- Integrated status LEDs
- Eye-safe
- TPS 100 for presence detection
- TPS 200 for level detection
- TPS 210 for direction recognition

Technical data

	TPS 100	TPS 200	TPS 210
Light beams	2	2	2
Detection levels	2	2	1
PNP outputs	1	2	2
Direction recognition	No	No	Yes
Test input	Yes	No	No

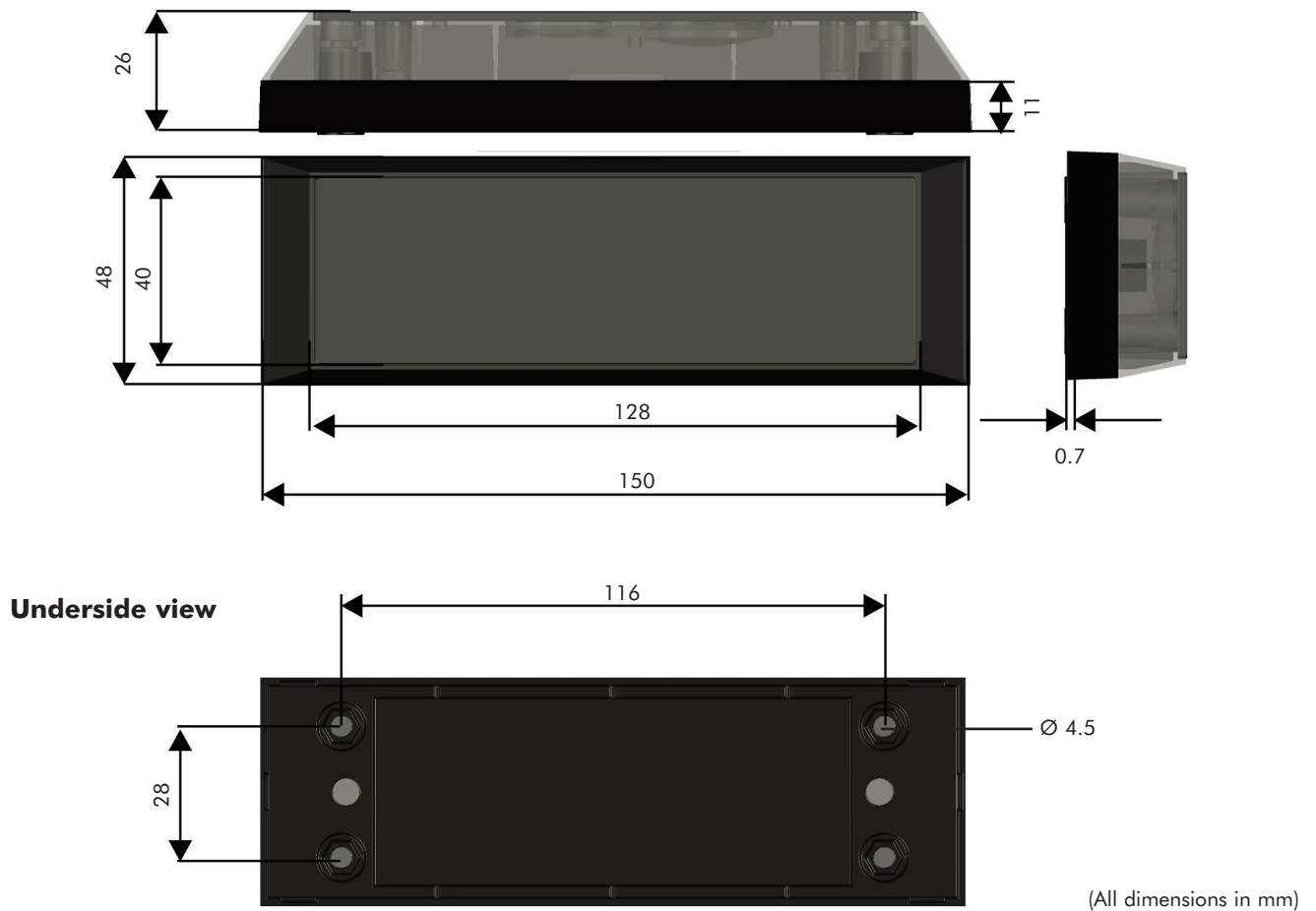| Optical	Value	Comments
Sensor type	Two beam infrared triangulation sensor	Used wavelength approx. 880 nm
Operating range	0.1 ... 2.0 m	On objects with a remission of $\geq$ 18% (Kodak-Gray test card)
Trigger level	0.3 ... 2.0 m	Manually adjustable
Distance detection accuracy	±5 mm	At 0.5 m with Kodak white and gray test card
	±10 mm	At 1.0 m with Kodak white and gray test card
	±20 mm	At 2.0 m with Kodak white and gray test card
Distance detection hysteresis	< 2%	With Kodak white test card
Light beam diameter	< 70 mm	At distance of 1.1 m
Light beam seperation	< 22 mm	
Max. ambient light	100,000 Lux	
Max. detection speed	5 m/s	

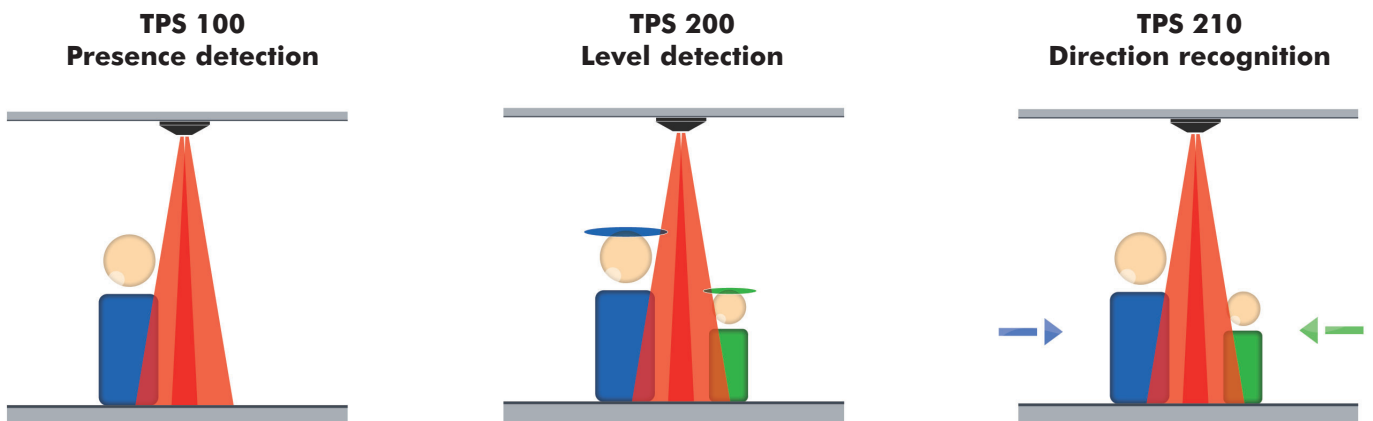| Electrical		
Supply voltage U_{sp} / Ripple at U_{sp}	10 - 30 VDC / max. 10%	
Current consumption	Max. 40 mA	
Connector type	4-pin M8 Connector, male	
Cable	0.15 m, pig-tail, incl. connecting cable 5 m	
Beam indicator	Two red LEDs	One red LED for each light beam
PNP output	1 - 2	Output current max. 50 mA short circuit protected

General		
Enclosure rating	IP65	
Temperature range	- 20° ... +65° C	
Dimensions (L x W x H)	150 x 48 x 26 mm	
Material	ABS blend black / PC visually black	
Mounting	Four screws	

DATASHEET

CEDES

More than you expect!

26

11

48

40

128

150

0.7

Underside view

116

28

Ø 4.5

(All dimensions in mm)

Types

TPS 100
Presence detection

TPS 200
Level detection

TPS 210
Direction recognition

Ordering information

Part no.	Type	Description
106 676	**TPS 100**	Presence detection sensor
106 677	**TPS 200**	Level detection sensor
106 678	**TPS 210**	Direction recognition sensor

Other configurations on request

PRELIMINARY

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