



Model Number

OMD8000-R2100-R2-V1V17

2D-Scanner

with two M12 x 1 connectors

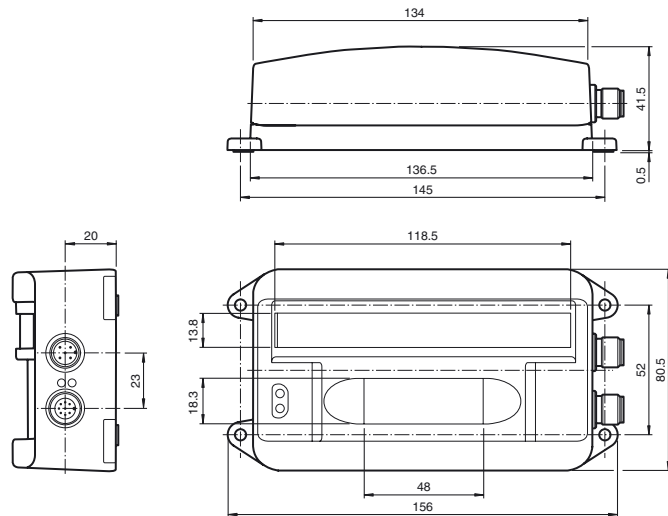
Features

- Measuring method PRT (Pulse Ranging Technology)
- Distance measurement using object
- Two-dimensional measurement with no moving parts
- Measurement using eye-safe LED technology
- 88° scanning angle

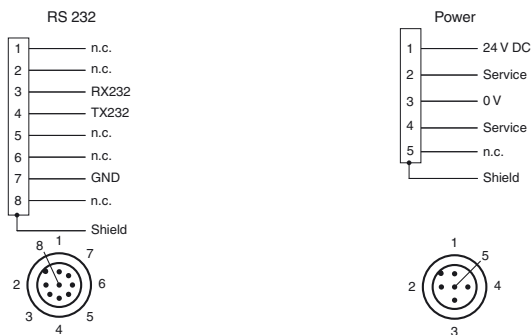
Product information

The new 2-dimensional multi-ray LED scanner uses tried-and-tested Pulse Ranging Technology and boasts a wide range of user-friendly features. The eye-safe LED technology in the sensor allows it to be used by personnel in all working areas without posing a danger. The 11 emitter elements arranged side by side span a scanning range of 88 degrees, while the emitter LEDs set themselves apart through their large light spot. Measuring on a surface rather than on a point makes it easier to measure inhomogeneous surfaces. A further highlight is the absence of any moving parts such as a motor or bearings, which makes the device less complex in its design and more resistant to mechanical stress.

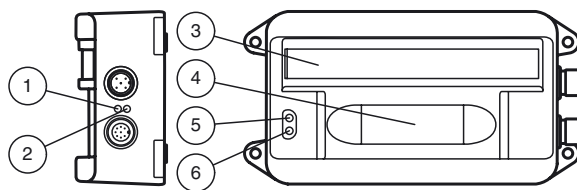
Dimensions



Electrical connection



Indicators/operating means



1	No function	
2	No function	
3	Emitter	
4	Receiver	
5	Operating indicator	green
6	Function indicator	yellow

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Technical data**General specifications**

Measurement range	0.2 ... 2 m (bw 6%) 0.2 to 8 m (wb 90%)
Light source	IREL
Light type	modulated infrared light , 850 nm
Measuring method	Pulse Ranging Technology (PRT)
Scan rate	20 s ⁻¹ (1 scan = 11 measurements)
Scanning angle	88°
Diameter of the light spot	550 mm at 4 m (central beam)
Resolution	1 mm

Indicators/operating means

Operation indicator	LED green
Function indicator	LED yellow

Electrical specifications

Operating voltage	U _B	10 ... 30 V
Ripple		10 % within the supply tolerance
No-load supply current	I ₀	≤ 120 mA / 24 V DC
Protection class		III (operating voltage 50 V)
Time delay before availability	t _v	< 3 s

Interface 1

Interface type	RS 232
Protocol	P+F R2100 115k, 8N1

Measurement accuracy

Measured value noise	20 mm (1 sigma, 4 m on white, central beam)
Angle resolution	8 °

Ambient conditions

Ambient temperature	-10 ... 50 °C (14 ... 122 °F)
Storage temperature	-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	95 % , no moisture condensation

Mechanical specifications

Degree of protection	IP42
Connection	5-pin, M12x1 connector, standard (supply) 8-pin, M12x1 connector, standard
Material	
Housing	plastic
Optical face	PMMA
Mass	approx. 270 g

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 60947-5-2:2007
Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

CCC approval	CCC approval / marking not required for products rated ≤36 V
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Accessories**V1-G-2M-PUR**

Female cordset, M12, 4-pin, PUR cable

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

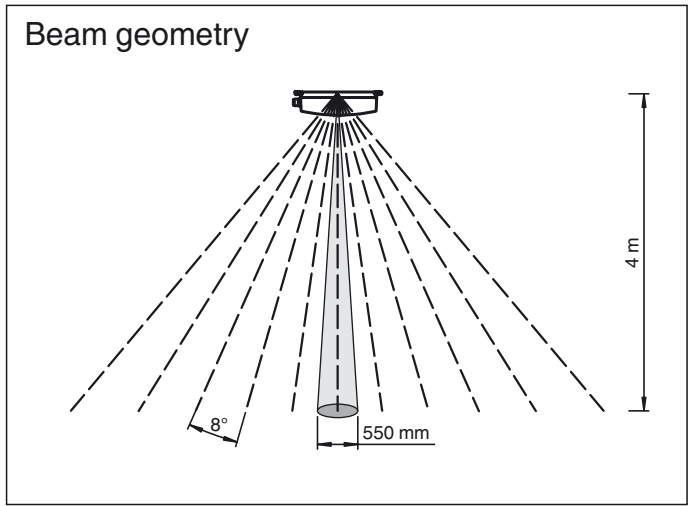
V19-G-5M-PVC

Female cordset, M12, 8-pin, PVC cable

Other suitable accessories can be found at www.pepperl-fuchs.com



Curves/Diagrams



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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