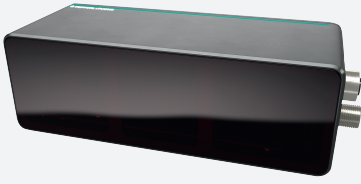


3-D stereo sensor

VSE1000-F400-B12-A1000

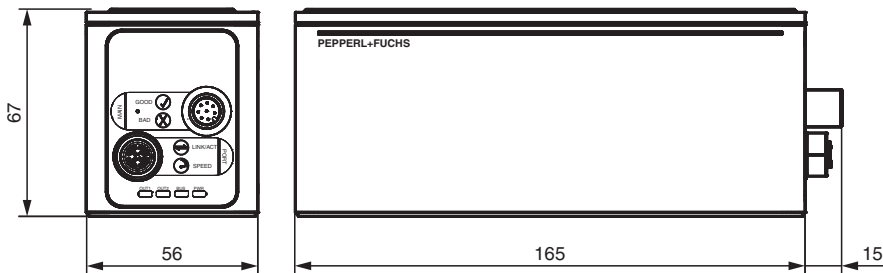


- Resolution 1300 x 1080 pixel
- Gigabit-Ethernet (GigE) interface
- Measurement data preprocessing
- Simple and fast mounting
- Intuitive and user-friendly operating software ViSolution
- Sturdy metallic housing
- C# API

The sensor uses stereo-vision technology and structured light to capture objects in 3-D. It can acquire raw 3-D data at a range of 300 to 900 mm with an image resolution of 1.4 MP and a frame rate of 10 fps. The sensor features a Gigabit Ethernet interface, intuitive operating software, rugged metal housing, and an API interface. As a raw data sensor, it is suitable for a variety of applications that require detailed contour detection.



Dimensions



Technical Data

Search characteristics	
Structured light	yes
General specifications	
Detection range	max. 900 mm
Measurement range	horizontal: 400 mm vertical: 300 mm deep : 300 mm
Light source	LED projector
Light type	Infrared Wave length 850 nm
Light direction	Structured light
Laser nominal ratings	
Laser class	
Target velocity	max. 1 m/s
Object reflectivity	> 18 %
Picture detail	dependant of operating distance
Depth of focus	max. 300 mm
Resolution	X 0.5 mm Y 0.5 mm Z 1 mm at 900 mm read distance
Nominal ratings	
Camera	

Release date: 2023-12-15 Date of issue: 2023-12-15 Filename: 70123992-100000_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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Technical Data

Number of pixels	1300 x 1080 pixels	
Shutter	Global shutter	
Frame rate	10 fps	
Image resolution	1.4 MP	
Disparity	128	
Functional safety related parameters		
MTTF _d	20 a	
Mission Time (T _M)	10 a	
Diagnostic Coverage (DC)	0 %	
Indicators/operating means		
Operation indicator	4 LEDs (OUT 1, OUT 2, BUS, PWR)	
Electrical specifications		
Operating voltage	U _B	24 V ± 20 % , PELV
No-load supply current	I ₀	max. 450 mA
Power consumption	P ₀	max. 10 W , Outputs without load
Interface		
Interface type	Ethernet TCP/IP	
Transfer rate	1 GBit/s	
Input		
Control input	1 digital input and External trigger	
Conformity		
Photobiological safety	Risk group 0 according to IEC 62471	
Compliance with standards and directives		
Standard conformity		
Noise immunity	EN 61000-6-2:2005	
Emitted interference	EN 61000-6-4:2007/A1:2011	
Degree of protection	EN 60529	
Shock and impact resistance	EN 60068-2-27:2009	
Function and system design		
Measuring principle	3-D image data Stereo vision Structured light	
Application	3-D raw data	
Approvals and certificates		
CE conformity	CE	
UKCA conformity	UKCA	
CCC approval	CCC approval / marking not required for products rated ≤36 V	
Ambient conditions		
Operating temperature	-20 ... 45 °C (-4 ... 113 °F) , (noncondensing; prevent icing on the lens!)	
Relative humidity	< 99 % , noncondensing	
Mechanical specifications		
Degree of protection	IP65/IP67	
Connection	M12 connector, 8-pin , A-coded 8-pin M12 socket , X-coded	
Material		
Housing	metal	
Optical face	Plastic pane	
Installation	M5 screws	
Mass	approx. 800 g	
Tightening torque, fastening screws	max. 2 Nm	
Dimensions		
Height	180 mm	
Width	56 mm	
Depth	67 mm	

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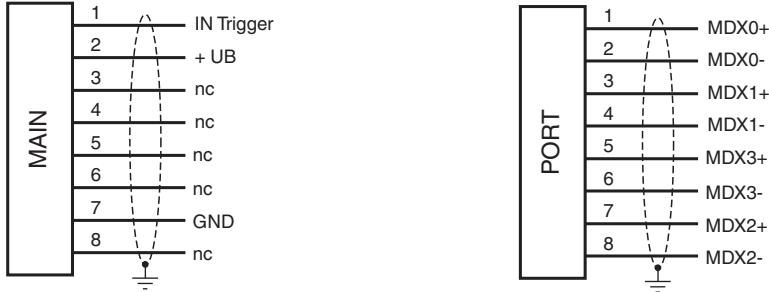
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 PEPPERL+FUCHS

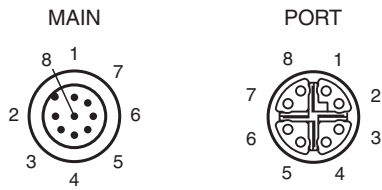
Technical Data

General information
 Note: INVISIBLE LED , DO NOT STARE INTO BEAM
 DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS

Connection Assignment



Connection



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