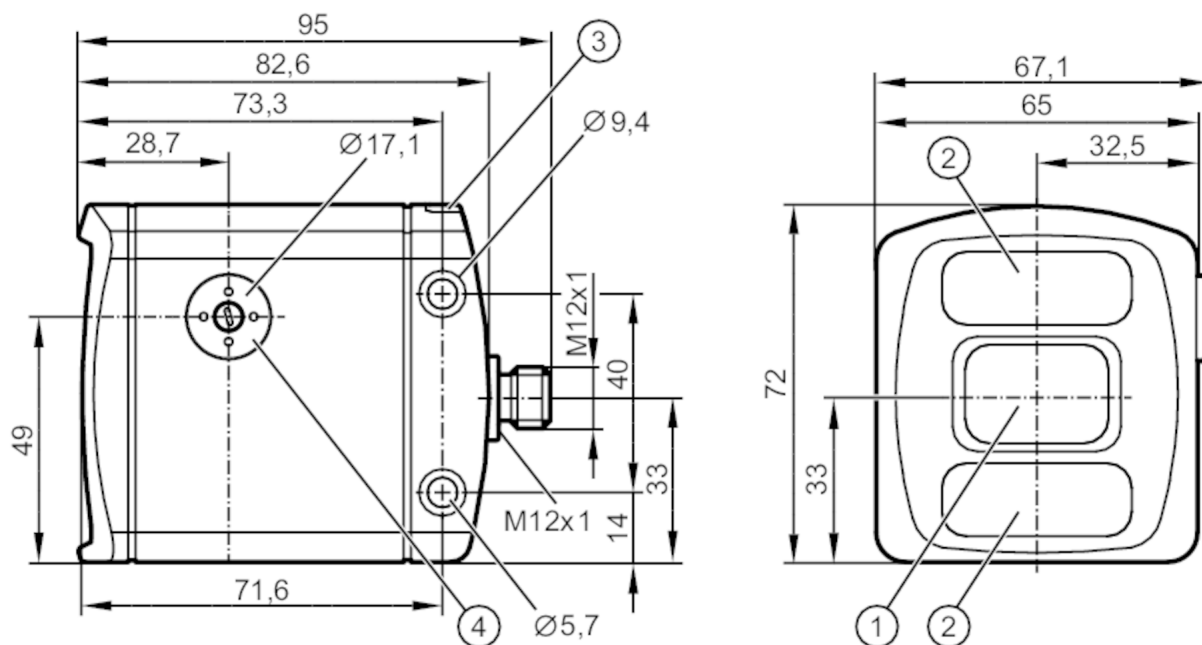


O3D301



3D camera

O3DIRDKG/E1/GM/T/40



- 1 lens
- 2 illumination unit
- 3 LED 2-color yellow/green
- 4 Focus adjustment screw



Product characteristics

Image resolution 3D	[px]	352 x 264
Angle of aperture 3D	[°]	40 x 30; (nominal value without lens distortion correction)
Max. reading rate	[Hz]	25

Application

Application	output of 3D image data
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Electrical data

Operating voltage	[V]	20.4...28.8 DC; (EN 61131-2)
Current consumption	[mA]	< 2400; (peak current pulsed; typical value: 420; maximum value: 1600)
Power consumption	[W]	10; (typical value)
Protection class		III
Image sensor		PMD 3D ToF-Chip
Integrated lighting		yes; (infrared: 850 nm invisible radiation LED)

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2
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Inputs

Trigger	24 V PNP/NPN (IEC 61131-2 Typ 3)
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Outputs

Total number of outputs	2
Number of digital outputs	2; (configurable)

O3D301



3D camera

O3DIRDKG/E1/GM/T/40

Output function		24 V PNP/NPN; (EN 61131-2)	
Max. current load per output [mA]		100	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	
Monitoring range			
Operating distance [mm]		300...10000	
Note on operating distance		object size: 200 x 200 mm	
		reflectivity: 18 %	
Image resolution 3D [px]		352 x 264	
Angle of aperture 3D [°]		40 x 30; (nominal value without lens distortion correction)	
Max. reading rate [Hz]		25	
Measuring/setting range			
Measuring range [m]		< 30	
Software / programming			
Parameter setting options		via PC with ifm Vision Assistant or XML-RPC	
Interfaces			
Communication interface		Ethernet	
Ethernet			
Number of Ethernet interfaces		1	
Transmission standard		10Base-T; 100Base-TX	
Transmission rate		10; 100	
Protocol		TCP/IP	
Factory settings		IP address: 192.168.0.69	
		subnet mask: 255.255.255.0	
		gateway IP address: 192.168.0.201	
Operating conditions			
Ambient temperature [°C]		-10...50	
Storage temperature [°C]		-40...85	
Protection		IP 65; IP 67	
Max. immunity to extraneous light [klx]		8; (with reduced measuring accuracy and repeatability: < 100)	
Tests / approvals			
EMC		DIN EN 61000-6-4	radiation of interference / industrial environments
		DIN EN 61000-6-2	noise immunity / industrial environments
Shock resistance		DIN EN 60068-2-27	50 g / (11 ms) not repetitive
		DIN EN 60068-2-27	40 g / (6 ms) repetitive
Vibration resistance		DIN EN 60068-2-6	2 g / (10...150 Hz)
		DIN EN 60068-2-64	2.3 g RMS / (10...500 Hz)
Photobiological safety		exempt group; (DIN EN 62471)	
Electrical safety		DIN EN 61010-2-201	electrical supply only via PELV circuits
MTTF [years]		45.02	

O3D301



3D camera

O3DIRDKG/E1/GM/T/40

Mechanical data

Weight	[g]	785
Dimensions	[mm]	72 x 67.1 x 82.6
Material	housing: diecast aluminium; front lens: Gorilla Glass; Function display: PA	

Displays / operating elements

Display	Function	2 x LED, green Ethernet Power
	Switching status	2 x LED, yellow OUT 1 OUT 2

Accessories

Items supplied	Protective covers
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Remarks

Pack quantity	1 pcs.
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Electrical connection - Ethernet

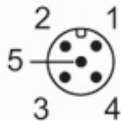
Connector: 1 x M12; coding: D



1	TD +
2	RD +
3	TD -
4	RD -

Electrical connection - Process connection

Connector: 1 x M12; coding: A



1	U+
2	trigger input
3	GND
4	Switching output 1 Ready
5	Switching output 2 Cascading

O3D301



3D camera

O3DIRDKG/E1/GM/T/40

Other data

Field of view size

	without lens distortion correction		with lens distortion correction	
Measuring range / distance [m]	Length [m]	Width [m]	Length [m]	Width [m]
0.50	0.27	0.36	0.26	0.35
1.00	0.53	0.73	0.52	0.69
2.00	1.07	1.46	1.04	1.39
3.00	1.60	2.19	1.56	2.08
4.00	2.13	2.92	2.08	2.78
5.00	2.67	3.65	2.61	3.47