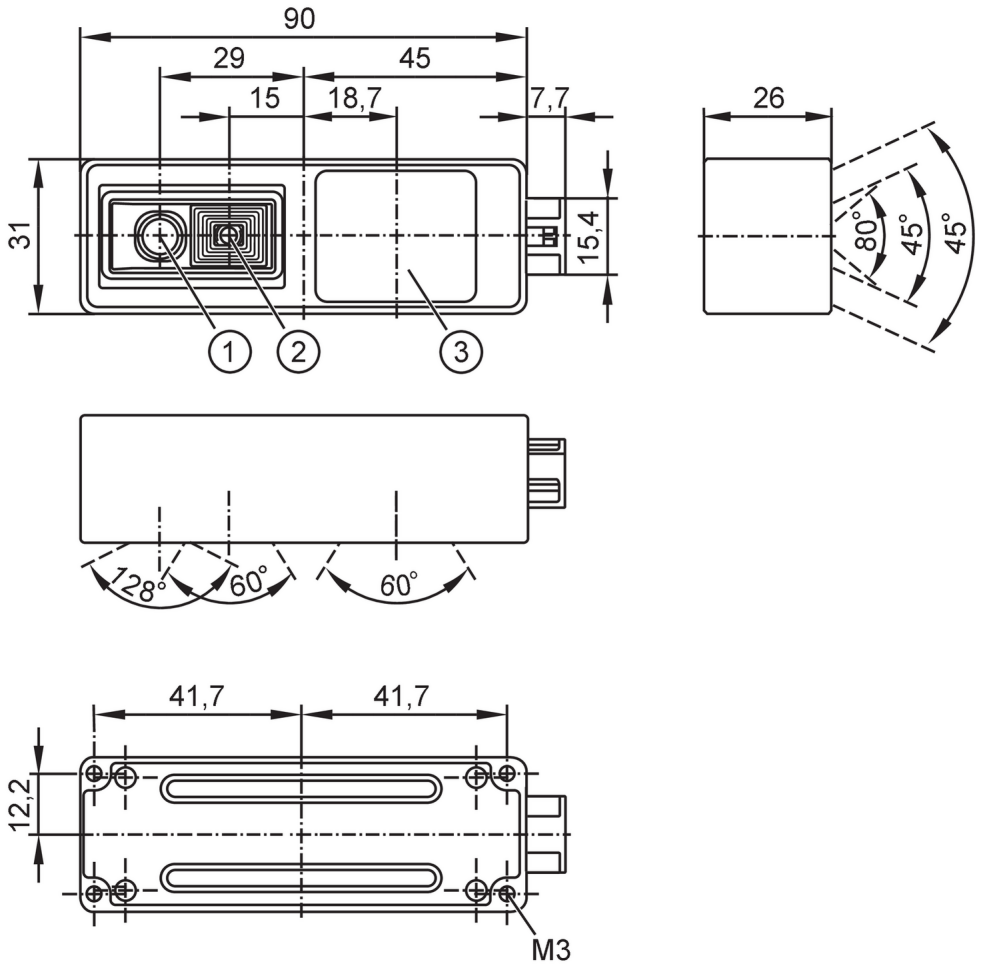
O3R222

3D camera

O3RIOOKG/2D3D/ZN/O/S/60



1 2D camera
2 3D sensor
3 Illumination unit

Product characteristics		
Image resolution	[px]	1280 x 800
Image resolution 3D	[px]	224 x 172
Angle of aperture	[°]	128 x 80
Angle of aperture 3D	[°]	60 x 45
Image repetition frequency	[Hz]	20
Image repetition frequency 3D	[Hz]	20

Electrical data		
Operating voltage	[V]	19.2...28.8 DC
Max. current consumption	[mA]	800
Power consumption	[W]	8.6; ((FPS x 0,32) + 2,2; FPS = Framerate Head)
Overvoltage category		II
Image sensor		PMD 3D ToF-Chip / 2D Chip
Internal lighting		yes; (infrared: 940 nm invisible radiation)

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Detection zone			
Image resolution	[px]	1280 x 800	
Image resolution 3D	[px]	224 x 172	
Angle of aperture	[°]	128 x 80	
Angle of aperture 3D	[°]	60 x 45	
Image repetition frequency	[Hz]	20	
Image repetition frequency 3D	[Hz]	20	
Interfaces			
Transmission standard		FPD-Link	
Connector type		HFM (Mini-FAKRA)	
Operating conditions			
Ambient temperature	[°C]	-10...40	
Storage temperature	[°C]	-40...85	
Max. height above sea level	[m]	4000	
Protection		IP 54	
Tests / approvals			
EMC		EN IEC 61000-6-4	radiation of interference / industrial environments
		EN IEC 61000-6-2	immunity / industrial environments
Shock resistance		EN 60068-2-27	50 g / (11 ms) not repetitive
		EN 60068-2-27	40 g / (6 ms) repetitive
Vibration resistance		EN 60068-2-6	2 g / (10...150 Hz)
		EN 60068-2-64	2.3 g RMS / (10...500 Hz)
Laser protection class		1	
Notes on laser protection		Caution:	invisible laser radiation
		laser class:	1
			IEC 60825-1:2014
			Complies with 21 CFR 1040.10 except for conformance with IEC 60825-1 Ed. 3, as described in Laser Notice No. 56, dated May 8, 2019.
Electrical safety		EN 61010-2-201	electrical supply only via PELV circuits
MTTF	[years]	42	
UL approval		Enclosure type	Type 1
		File number UL	E205959
Mechanical data			
Weight	[g]	190.495	
Dimensions	[mm]	90 x 31 x 26	
Materials		housing: diecast zinc coated; Cover: polycarbonate; window: glass / polycarbonate; rear of the housing: aluminium coated	
Tightening torque	[Nm]	< 0.8	

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Accessories	
Accessory required	Video Processing Unit 1 x, OVP810
	Video Processing Unit 1 x, OVP811
	Video Processing Unit 1 x, OVP812
	Video Processing Unit 1 x, OPP813
	only one of the listed video processing units is required; the required version depends on the respective application.

Remarks	
Pack quantity	1 pcs.

Electrical connection - 2D/3D camera

Connector: 1 x Dual-HFM (AMK142-1M4Z5-A)

Other data

Field of view size

measuring range / distance [m]	Length [m]	Width [m]
1.00	1.15	0.80
2.00	2.30	1.65
3.00	3.45	2.50
4.00	4.60	3.30
5.00	5.80	4.15
6.00	6.95	4.95
7.00	8.10	5.80

repeatability of the distance measurement of an individual pixel

measuring range / distance [m]	repeatability of the measured distance values on grey objects (18% reflectivity) [mm]	accuracy [mm]
	typical value	typical value
0...1	± 5	± 9
1...2	± 6	± 10
2...3	± 9	± 12
3...4	± 13	± 13
4...5	± 19	± 15
5...6	± 27	± 16
6...7	± 36	± 18

object in centre of the image

Ambient temperature 20° C

measured at a reflectivity of 18% to 90%

The repeatability can be optimised with filter functions

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Temperature drift

Temperature range	-10...40 °C
Temperature drift [mm/K]	0.1