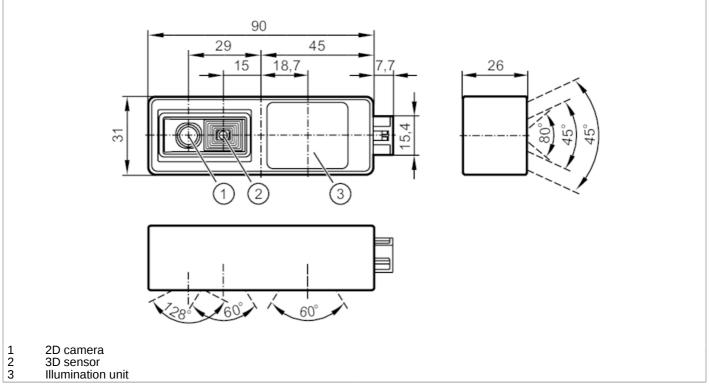
O3R222

3D camera

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





C€ EK

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]	19.228.8 DC	
Max. current consumption	[mA]	800	
Power consumption	[W]	8.6; ((FPS x 0,32) + 2,2; FPS = Framerate Head)	
Image sensor		PMD 3D ToF-Chip / 2D Chip	
Integrated lighting		yes; (infrared: 940 nm invisible radiation)	
Monitoring range			
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	

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Interfaces				
Transmission standard	FPD-Link			
Type of connector		HFM (Mini-Fakra)		
Operating conditions				
Ambient temperature [°C]]	-1040		
Storage temperature [°C]	-4085			
Protection	IP 54			
Tests / approvals				
EMC	EN IEC 61000-6-4	radiation of interference / residential, commercial and light-industrial environments		
	EN IEC 61000-6-2	noise 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 / (10150 Hz)		
	EN 60068-2-64	2.3 g RMS / (10500 Hz)		
Laser protection class		1		
Notes on laser protection	Caution:	Laser light		
	laser class:	1 EN / IECC003E 1:2014		
		EN / IEC60825-1:2014 Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.		
Electrical safety	EN 61010-2-201	electrical supply only via PELV circuits		
Electrical safety Mechanical data	EN 61010-2-201	electrical supply only via PELV circuits		
		electrical supply only via PELV circuits 187.9		
Mechanical data				
Mechanical data Weight [g]	housing: die	187.9		
Mechanical data Weight [g] Dimensions [mm]	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window:		
Mechanical data Weight [g] Dimensions [mm] Material	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm]	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D cam Connector: 1 x Dual-HFM (AMK142-	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D can Connector: 1 x Dual-HFM (AMK142- Other data Field of view size	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8 1 pcs.		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D cam Connector: 1 x Dual-HFM (AMK142-	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D cam Connector: 1 x Dual-HFM (AMK142- Other data Field of view size Measuring range / distance [m]	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8 1 pcs. Width [m]		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D cam Connector: 1 x Dual-HFM (AMK142- Other data Field of view size Measuring range / distance [m] 1.00	housing: die glass / PMM	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8 1 pcs. Width [m] 0.80		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D cam Connector: 1 x Dual-HFM (AMK142- Other data Field of view size Measuring range / distance [m] 1.00 2.00	housing: die glass / PMM hera -1M4Z5-A) Length [m] 1.15 2.30	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8 1 pcs. Width [m] 0.80 1.65		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D cam Connector: 1 x Dual-HFM (AMK142- Other data Field of view size Measuring range / distance [m] 1.00 2.00 3.00	housing: die glass / PMM l nera -1M4Z5-A) Length [m] 1.15 2.30 3.45	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8 1 pcs. Width [m] 0.80 1.65 2.50		
Mechanical data Weight [g] Dimensions [mm] Material Tightening torque [Nm] Remarks Pack quantity Electrical connection - 2D/3D can Connector: 1 x Dual-HFM (AMK142- Other data Field of view size Measuring range / distance [m] 1.00 2.00 3.00 4.00	housing: die glass / PMM housing: die glass / PMM Length [m] 1.15 2.30 3.45 4.60	187.9 90 x 31 x 26 cast zinc coated; Cover: PMMA; window: IA; rear of the housing: aluminum coated < 0.8 1 pcs. Width [m] 0.80 1.65 2.50 3.30		

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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
01	± 5	± 9
12	± 6	± 10
23	± 9	± 12
34	± 13	± 13
45	± 19	± 15
56	± 27	± 16
67	± 36	± 18

object in centre of the image

Ambient temperature

20° C

measured at a reflectivity of 18% to 90%

The repeatability can be optimized with filter functions

Temperature drift

Temperature range	-1040 °C
Temperature drift [mm/K]	0.1