

3D sensor

O3DIRP3KG/E1/E2/GM/W/64

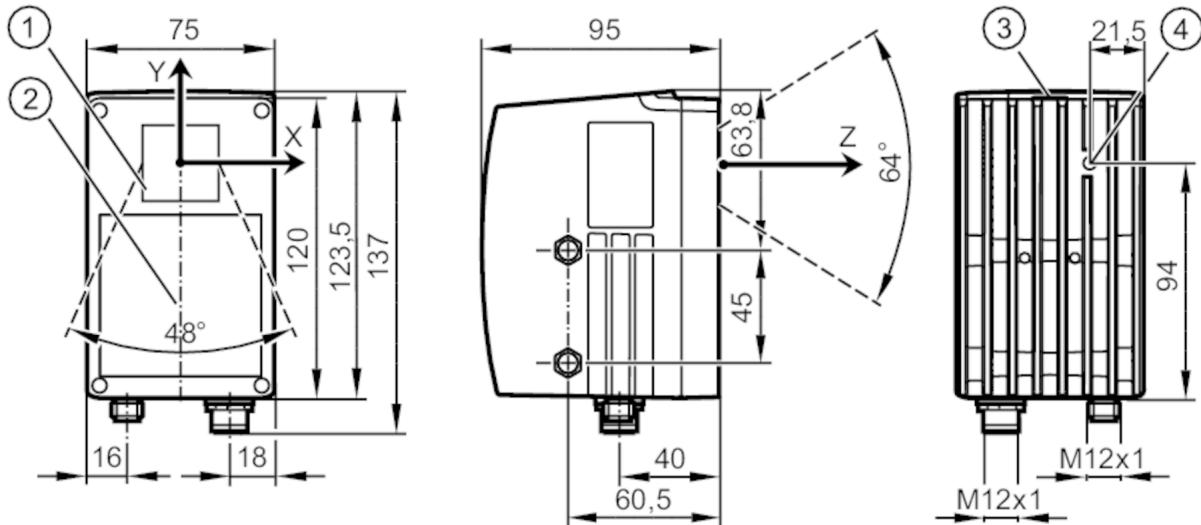
phase-out article

Alternative articles: O3D302

When selecting an alternative article and accessories please note that technical data may differ!

For 8-pole sockets the core colours are not standardised.

Please note the wiring of the sensor and the sockets (see data sheet).



- 1 lens
 2 Illumination unit
 3 Display / pushbuttons / LEDs
 4 focus adjustment screw



Product characteristics

Image resolution 3D	[px]	64 x 48
Angle of aperture 3D	[°]	64 x 48
Max. reading rate	[Hz]	20

Application

Application	Level monitoring; distance monitoring; volume monitoring
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Electrical data

Operating voltage	[V]	20.4...28.8 DC; (EN 61131-2)
Current consumption	[mA]	< 2000; (peak current pulsed; typical value: 600)
Power consumption	[W]	15
Protection class		III
Image sensor		PMD 3D ToF-Chip
Internal lighting		yes; (infrared: 850 nm invisible radiation LED class 1)

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Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 2; Number of digital outputs: 2
Inputs		
Trigger		24 V PNP (IEC 61131-2 Typ 1)
Number of digital inputs		2
Input circuit of digital inputs		24 V PNP; (configurable; IEC 61131-2 Typ 1)
Outputs		
Total number of outputs		2
Number of digital outputs		2; (configurable)
Output function		24 V PNP; (EN 61131-2 Typ 2)
Max. voltage drop switching output DC	[V]	1
Max. current load per output	[mA]	100
Analogue current output	[mA]	4...20
Max. load	[Ω]	300
Analogue voltage output	[V]	0...10
Min. load resistance	[Ω]	10000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Detection zone		
Operating distance	[mm]	200...5500
Note on operating distance		white paper: 200 x 200 mm reflectivity: 90 %
Image resolution 3D	[px]	64 x 48
Angle of aperture 3D	[°]	64 x 48
Max. reading rate	[Hz]	20
Software / programming		
Parameter setting options		via two pushbuttons and 10-segment display or via PC / notebook with operating software
Interfaces		
Communication interface		Ethernet
Ethernet		
Number of Ethernet interfaces		1
Transmission standard		10Base-T; 100Base-TX
Transmission rate		10; 100
Protocol		TCP/IP; EtherNet/IP
Factory settings		IP address: 192.168.0.69 subnet mask: 255.255.255.0 gateway IP address: 192.168.0.201 MAC address: see type label
Operating conditions		
Ambient temperature	[°C]	-10...50
Storage temperature	[°C]	-40...85

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Protection	IP 67			
Max. immunity to extraneous light [klx]		8; (on the object)		
Tests / approvals				
EMC	EN 61000-6-4	radiation of interference / industrial environments		
	EN 61000-6-2	immunity / industrial environments		
Shock resistance	DIN EN 60068-2-27	30 g 11 ms		
Vibration resistance	DIN EN 60068-2-6	2 g 10...150 Hz		
Photobiological safety		exempt group; (DIN EN 62471)		
Electrical protection	EN 61131-2	electrical supply only via PELV circuits		
Mechanical data				
Weight [g]		1200		
Dimensions [mm]		123.5 x 75 x 95		
Materials	housing: diecast aluminium; front pane: PMMA; display window: PC			
Displays / operating elements				
Display	switching status	4 x LED, yellow 4 x LED, green 10-segment display, 4-digit		
Accessories				
Items supplied	Protective covers			
Remarks				
Pack quantity	1 pcs.			
Electrical connection - Ethernet				
Connector: 1 x M12; coding: D				
 1 TD + 2 RD + 3 TD - 4 RD -				

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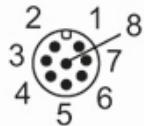


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Electrical connection - Process connection

Connector: 1 x M12; coding: A



1	U+
2	trigger signal
3	0 V
4	OUT 1 analogue output
5	Ready
6	OUT 2
7	IN 1 switching input 1
8	IN 2 switching input 2

Other data

Field of view size

measuring range / distance	Length	Width	minimum object surface
200	250	170	7 x 7
1000	1260	870	37 x 37
2000	2520	1740	73 x 73
3000	3780	2610	109 x 109
4000	5040	3480	145 x 145
5500	6930	4790	200 x 200

For reliable detection the object must be detected by at least 2 x 2 pixels