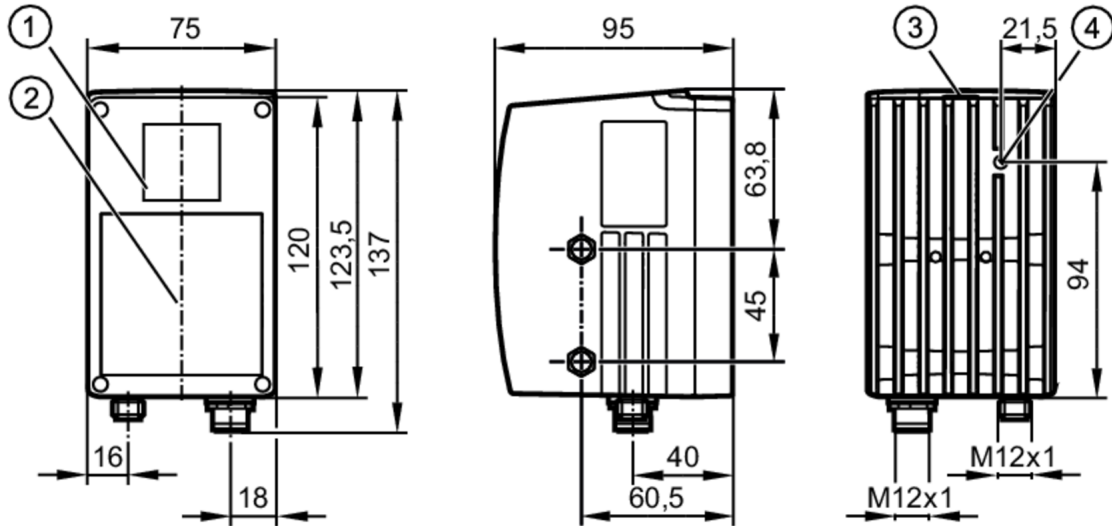


O3D201



3D camera

PMD 3D CAMERA



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



Product characteristics

Image resolution	[px]	64 x 48
Angle of aperture	[°]	40 x 30
Max. reading rate	[Hz]	20
Dimensions	[mm]	123.5 x 75 x 95

Electrical data

Operating voltage tolerance	[%]	10
Operating voltage	[V]	24 DC
Current consumption	[mA]	peak current pulsed: 3250; typical value: 960
Power consumption	[W]	16
Protection class		III
Image sensor		PMD 3D ToF-Chip
Internal lighting		yes

Inputs / outputs

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

Number of digital inputs	2
Trigger	24 V PNP (IEC 61131-2 Typ 1)
Input circuit of digital inputs	24 V PNP; (configurable; IEC 61131-2 Typ 1)



3D camera

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Outputs	
Total number of outputs	2
Number of digital outputs	2; (configurable)
Output function	24 V PNP
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	
Image resolution [px]	64 x 48
Angle of aperture [$^{\circ}$]	40 x 30
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
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 [$^{\circ}\text{C}$]	-10...50
Storage temperature [$^{\circ}\text{C}$]	-40...85
Protection	IP 67
Tests / approvals	
MTTF [years]	55
Mechanical data	
Weight [g]	1176
Dimensions [mm]	123.5 x 75 x 95
Materials	housing: diecast aluminium; front lens: PMMA; display window: PC



3D camera

PMD 3D CAMERA

Displays / operating elements		
Display	switching status	4 LED, yellow
		4 x LED, green
		10-segment display, 4-digit
Remarks		
Notes	For 8-pole sockets the core colours are not standardised.; Please note the wiring of the sensor and the sockets (see data sheet).	
Pack quantity	1 pcs.	

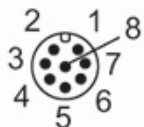
Electrical connection - Ethernet		
1	TD +	
2	RD +	
3	TD -	
4	RD -	

Connector: 1 x M12



Electrical connection - Process connection		
1	U+	
2	trigger input	
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	

Connector: 1 x M12



O3D201



3D camera

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Other data

Field of view size

measuring range / distance	Length	Width	center pixel [mm]	minimum object surface
500	420	290	7 x 7	13 x 13
1000	840	580	13 x 13	26 x 26
1500	1260	870	20 x 20	39 x 39
2000	1680	1160	26 x 26	53 x 53
2500	2100	1450	33 x 33	66 x 66
3000	2520	1740	39 x 39	79 x 79
3500	2940	2030	46 x 46	92 x 92
4000	3360	2320	53 x 53	105 x 105
4500	3780	2610	59 x 59	118 x 118
5000	4200	2900	66 x 66	131 x 131
5500	4620	3190	72 x 72	144 x 144
6000	5040	3480	79 x 79	158 x 158

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