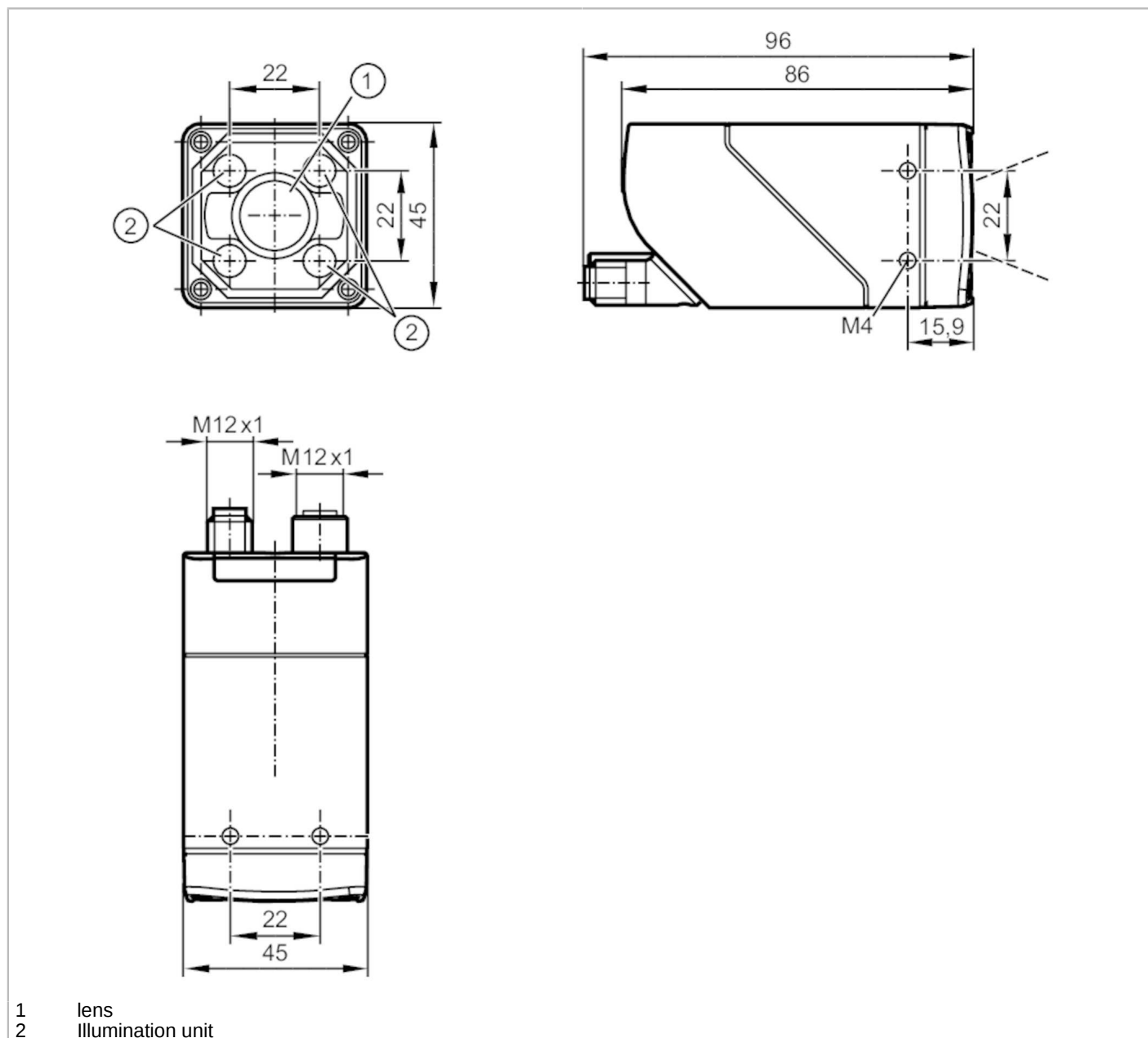


O2D510



Object recognition sensor

O2DCRDKG/E1/E4/EF/GM/TB/S/16



- 1 lens
- 2 illumination unit



Product characteristics

Type of light		RGBW
Image resolution	[px]	1280 x 960
Max. reading rate	[Hz]	40

Application

System	polarization filter
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Electrical data

Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 300; (24V DC; with switched outputs: < 400 mA)
Protection class		III
Reverse polarity protection		yes

O2D510



Object recognition sensor

O2DCRDKG/E1/E4/EF/GM/TB/S/16

Type of light	RGBW
Wave length [nm]	625; 525; 453
Image sensor	CMOS image sensor black/white

Inputs / outputs

Number of inputs and outputs	Number of digital inputs: 1; Number of digital outputs: 1
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Inputs

Trigger	external; 24 V PNP/NPN (IEC 61131-2 Typ 3); TCP/IP; PROFINET; internal
Number of digital inputs	1

Outputs

Electrical design	PNP/NPN; (configurable)
Number of digital outputs	1; (configurable)
Max. voltage drop switching output DC [V]	1
Max. current load per output [mA]	100
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Field of view size [mm]	Operating distance	Field of view		
	85		28 x 21	
	300		92 x 69	
	500		152 x 114	
	1000		302 x 227	
	1500		453 x 340	
	2000		603 x 452	
	2500		753 x 564	
Operating distance [mm]			> 85	
Image resolution [px]			1280 x 960	
Lens type			standard	
Polarization filter available			yes	
Max. reading rate [Hz]			40	

Software / programming

Parameter setting options	via PC with ifm Vision Assistant
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Interfaces

Communication interface	Ethernet
Ethernet	
Number of Ethernet interfaces	1
Transmission standard	10Base-T; 100Base-TX
Transmission rate	10 MBit/s; 100 MBit/s
Protocol	TCP/IP; PROFINET

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Factory settings	IP address: 192.168.0.69
	subnet mask: 255.255.255.0 (Class C)
	gateway IP address: 192.168.0.201
	MAC address: see type label
Usage type	Parameter setting; Data transmission

Operating conditions

Ambient temperature	[°C]	-10...50
Storage temperature	[°C]	-40...70
Max. relative air humidity	[%]	90; (non condensing)
Max. height above sea level	[m]	4000
Protection		IP 65
Degree of soiling		2

Tests / approvals

EMC	EN IEC 61000-6-4 radiation of interference	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 (10 ... 150 Hz)
Photobiological safety		risk group 1; (EN 62471)
Electrical safety	EN IEC 61010-2-201	electrical supply only via PELV circuits

Mechanical data

Weight	[g]	622.35
Type of mounting		screw mounting; (bore hole M4 x 7mm)
Dimensions	[mm]	45 x 45 x 86
Material		housing: diecast zinc powder-coated; front lens: Gorillaglas; LED window: PC; pushbuttons: POM
Sealing material		FKM
Tightening torque	[Nm]	2.1

Displays / operating elements

Display	Function	2 x LED, green
	Function	2 x LED, yellow
	Multi-function button	2 x LED, green/yellow
Operating elements	1	Multi-function button

Accessories

Accessories (optional)	Mounting accessories
	Protective panes

Remarks

Pack quantity	1 pcs.
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Electrical connection - Ethernet

Connector: 1 x M12; coding: D; Moulded body: stainless steel; sealing: FKM



1	TxD+
2	RxD+
3	TxD-
4	RxD-
	shield connected

Electrical connection - supply

Connector: 1 x M12; coding: L; Moulded body: stainless steel



1	24 V DC
2	not used / trigger input
3	GND
4	not used / Ready / OUT1
5	not used