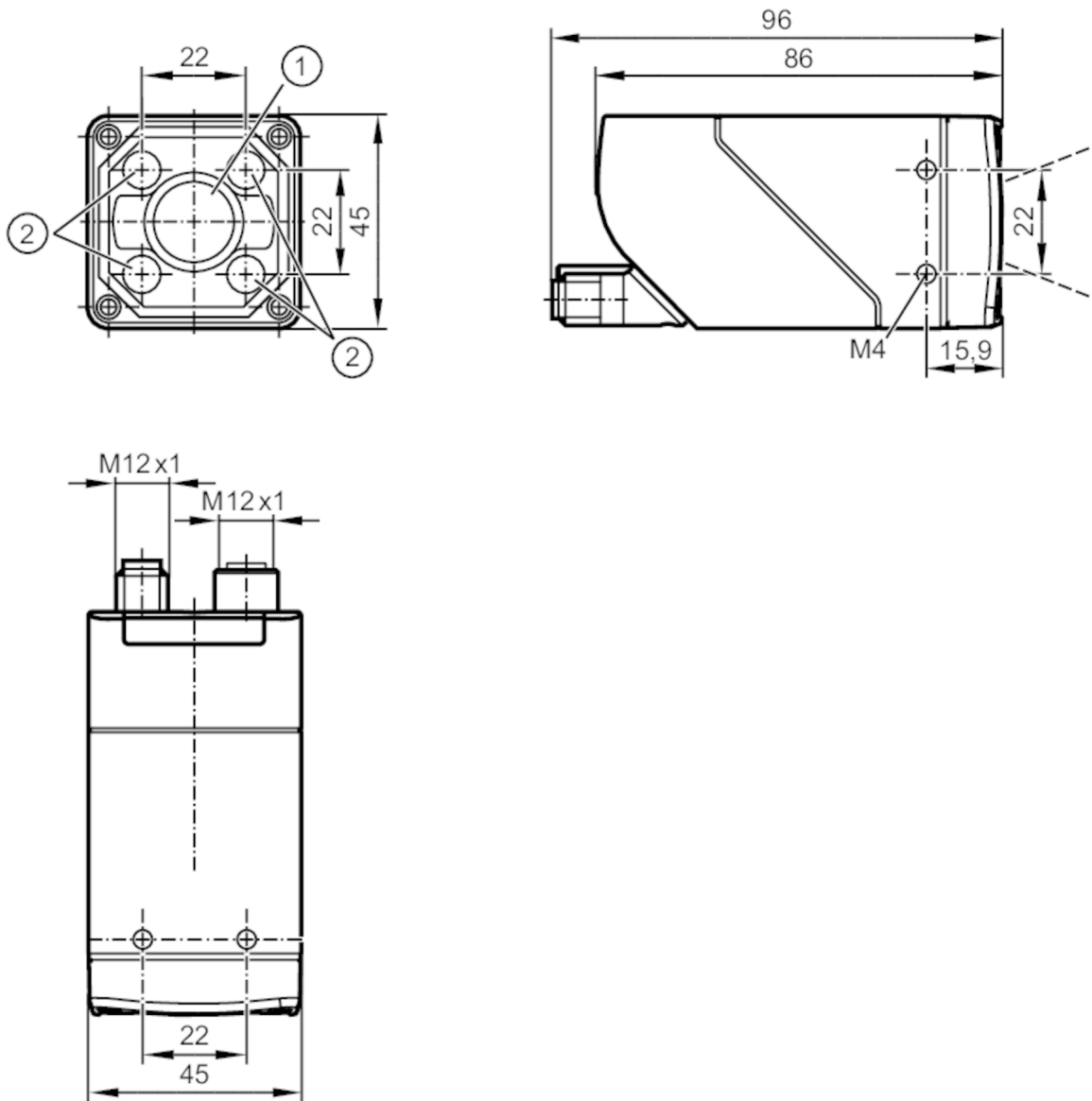




1D / 2D code readers

O2ICRDKG/E1/IO/EF/TB/W



- 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]	< 400; (18 V DC typical)
Max. current consumption	[mA]	800; (18V DC, with switched outputs, memory stick active)
Protection class		III

O2I402



1D / 2D code readers

O2ICRDKG/E1/IO/EF/TB/W

Reverse polarity protection	yes
Overvoltage category	II
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 outputs: 2
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Inputs

Trigger	external; 24 V PNP/NPN (IEC 61131-2 Typ 3); internal
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Outputs

Total number of outputs	2
Electrical design	PNP/NPN; (configurable)
Number of digital outputs	2; (configurable)
Output function	configurable
Max. voltage drop switching output DC [V]	2
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		
		15	18 x 13		
		100	80 x 60		
		300	226 x 170		
		500	373 x 280		
		1000	739 x 555		
Operating distance	[mm]	> 15			
Image resolution	[px]	1280 x 960			
Lens type		super wide angle			
Readable codes		Interleaved 2-of-5; Industrial 2-of-5; Code 39; Code 93; Code 128; Pharmacode; Codabar; EAN8; EAN8 Add-On 2; EAN8 Add-On 5; EAN13; EAN13 Add-On 2; EAN13 Add-On 5; UPC-A; UPC-A Add-On 2; UPC-A Add-On 5; UPC-E; UPC-E Add-On 2; UPC-E Add-On 5; GS1 DataBar Omnidirectional; GS1 DataBar Truncated; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; GS1 DataBar Limited; GS1 DataBar Expanded; GS1 DataBar Expanded Stacked; GS1 - 128; MSI Barcode; ECC200; PDF-417; QR; Micro-QR; Aztec Code; GS1 ECC200; GS1 QR Code; GS1 Aztec Code			
Code quality based on				ISO / IEC 15415	
				ISO / IEC 15416	
				AIM DPM	
				ISO/IEC TR 29158	
				SEMI T10	
Legible fonts		Industrial; Document; OCR-A; OCR-B; Pharma; Semi; Universal; Dot Print			
Text recognition		yes			
Polarization filter available		yes			
Omnidirectional reading		yes			



1D / 2D code readers

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Max. inclination to the image plane	[°]	45
Max. reading rate	[Hz]	40

Software / programming

Parameter setting options	teach button; via PC with ifm Vision Assistant
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Interfaces

Communication interface	IO-Link	
Transmission type	COM3 (230,4 kBaud)	
IO-Link revision	1.1	
Profiles	Common - I&D	Identification and Diagnosis
	Function	Locator
	Function	ProductURI
Required master port class	A	
Min. process cycle time	[ms]	4.2
Supported DeviceIDs	Type of operation	DeviceID
	default	1699

Ethernet

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

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	3	

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 61010-2-01	electrical supply only via PELV circuits
MTTF	[years]	58

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1D / 2D code readers

O2ICRDKG/E1/IO/EF/TB/W

UL approval	Ta	-10...50 °C
	Enclosure type	1
	voltage supply	Limited Energy
	File number UL	E364788

Mechanical data

Weight	[g]	591.4
Type of mounting		screw mounting; (bore hole M4 x 7 mm)
Dimensions	[mm]	45 x 45 x 86
Material		housing: diecast zinc powder-coated; front lens: PMMA; 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
	Teach-Funktion	1 x LED, green
	Teach-Funktion	1 x LED, yellow
Operating elements	1 x	Teach-Taste

Accessories

Accessories (optional)	Operating software
	Mounting accessories
	Adapter cable
	protective and filter windows

Remarks

Pack quantity	1 pcs.
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Electrical connection

Electrical connection - Ethernet

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



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

O2I402

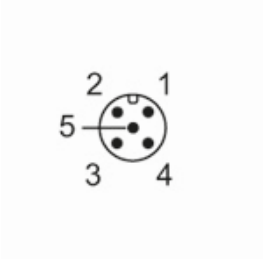


1D / 2D code readers

O2ICRDKG/E1/IO/EF/TB/W

Electrical connection - supply

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



1	U+
2	trigger input
3	0 V
4	Switching output 1 configurable / IO-Link
5	Switching output 2 configurable / trigger output with external illumination