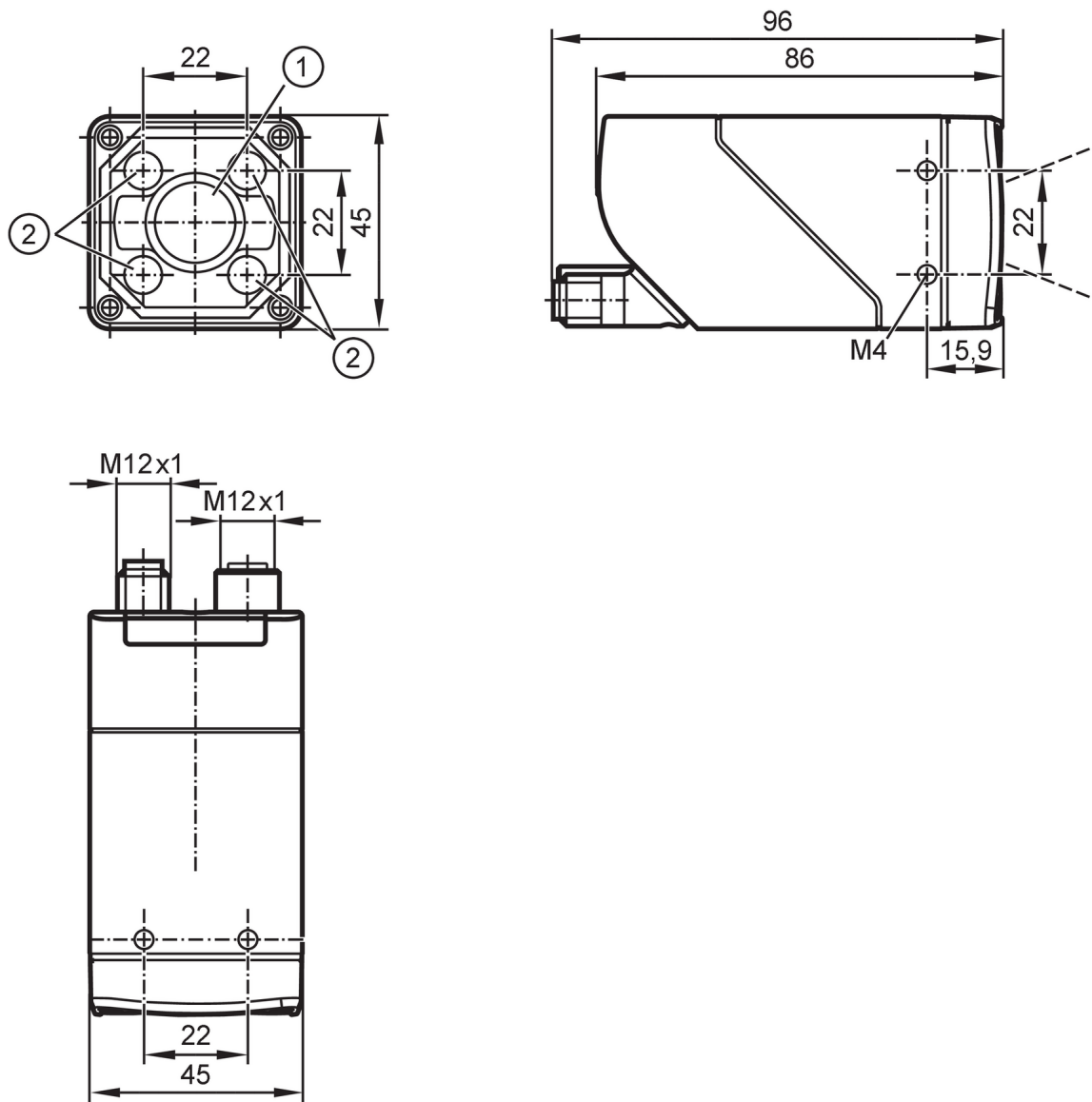


O2I420



1D / 2D code readers

O2IIRDKG/E1/IO/EF/TB/S



- 1 lens
- 2 Illumination unit



Product characteristics

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

Electrical data

Operating voltage [V]	18...30 DC
Current consumption [mA]	< 380; (18 V DC typical)
Max. current consumption [mA]	650; (18V DC, with switched outputs, memory stick active)
Protection class	III
Reverse polarity protection	yes
Overvoltage category	II
Type of light	Infrared light

O2I420



1D / 2D code readers

O2IIRDKG/E1/IO/EF/TB/S

Wave length	[nm]	850			
Image sensor		CMOS image sensor black/white			
Inputs / outputs					
Number of inputs and outputs		Number of digital outputs: 2			
Inputs					
Trigger		external; 24 V PNP/NPN (IEC 61131-2 Typ 3); internal			
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		
		85	28 x 21		
		300	92 x 69		
		500	152 x 114		
		1000	302 x 227		
Operating distance	[mm]	> 85			
Image resolution	[px]	1280 x 960			
Lens type		standard			
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			
Bewegungsgeschwindigkeit	[m/s]	7			
Omnidirectional reading		yes			
Max. inclination to the image plane	[°]	45			
Max. reading rate	[Hz]	40			



1D / 2D code readers

O2IIRDKG/E1/IO/EF/TB/S

Software / programming		
Parameter setting options		teach button; via PC with ifm Vision Assistant
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	
Pollution degree	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	exempt group; (EN 62471)	
Electrical safety	EN IEC 61010-2-201	electrical supply only via PELV circuits
MTTF [years]	52	
UL approval	Ta	-10...50 °C
	Enclosure type	1
	voltage supply	Limited Energy
	File number UL	E364788
Mechanical data		
Weight [g]	594.4	



1D / 2D code readers

O2IIRDKG/E1/IO/EF/TB/S

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

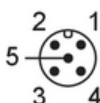
Connector: 1 x M12; coding: D; Contacts: 4; Moulded body: stainless steel; sealing: FKM



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

Electrical connection - supply

Connector: 1 x M12; coding: A; Contacts: 5; 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