



1D / 2D code readers

O2IIRDKG/E1/E4/EF/VF/TB/W



- 1 lens
- 2 illumination unit
- 3 laser spots



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]	< 600; (24V DC)
Protection class		III
Reverse polarity protection		yes
Type of light		Infrared light



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Wave length	[nm]	850
Image sensor		CMOS image sensor black/white
Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 1; Number of digital outputs: 2
Inputs		
Trigger		external; 24 V PNP/NPN (IEC 61131-2 Typ 3); TCP/IP; PROFINET; internal
Number of digital inputs		1
Outputs		
Total number of outputs		2
Number of digital outputs		2; (configurable)
Output function		24 V PNP/NPN
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
		35
		25 x 19
		300
Operating distance	[mm]	184 x 138
		500
		304 x 228
Image resolution	[px]	1000
		604 x 453
Operating distance	[mm]	> 35
Image resolution	[px]	1280 x 960
Lens type		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
Omnidirectional reading		yes
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	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	
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
Protection	IP 65	
Tests / approvals		
EMC	EN 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)
Laser protection class	1	
Notes on laser protection	Caution:	Laser light
	laser class:	1
		EN / IEC60825-1:2007
		EN / IEC60825-1:2014
		Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.
Photobiological safety	exempt group; (EN 62471)	
Electrical safety	EN 61010-2-201	electrical supply only via PELV circuits
Mechanical data		
Weight	[g]	599.8
Dimensions	[mm]	45 x 45 x 86
Material	housing: diecast zinc powder-coated; front lens: Gorillaglas; LED window: PC; pushbuttons: POM	
Sealing material	FKM	
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

O2I513



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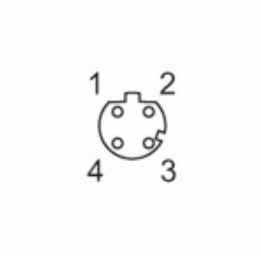
Accessories	
Accessories (optional)	Operating software
	Mounting accessories
	Adapter cable
	protective and filter windows

Remarks	
Pack quantity	1 pcs.

Electrical connection

Electrical connection - Ethernet

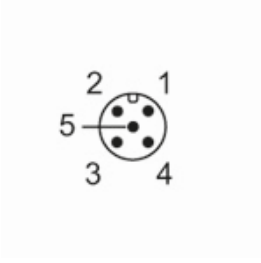
Connector: 1 x M12; coding: D; Moulded body: stainless steel; sealing: FKM



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

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
5	Switching output 2 configurable / trigger output with external illumination