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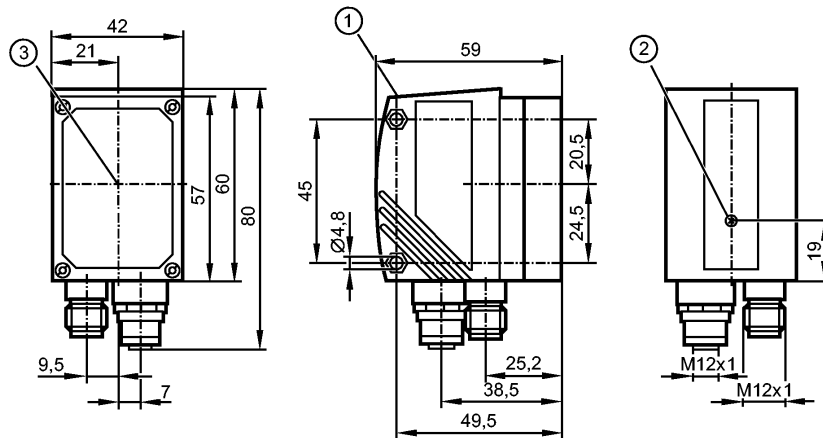## O2I104
O2IROS-G/D/RS232/E1/E2

<div style="border:red">

Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.

</div>

1: display
2: Focus adjustment screw
3: Centre of the lens axes

CE c(UL)us LISTED

Product characteristics
Multicode Reader
Max. field of view size: 400 x 300 mm
integrated, configurable code evaluation
Process interfaces Ethernet TCP/IP, EtherNet/IP, RS-232
Parameter setting interfaces Ethernet TCP/IP; UDP/IP
Integrated lighting: red light (625 nm)

Application	
Readable codes	ECC200, PDF-417, QR 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 RSS-14, RSS-14 Truncated, RSS-14 Stacked, RSS-14 Stack Omnidirection, RSS Limited, RSS Expanded, RSS Expanded Stacked

Electrical data		
Operating voltage	[V]	24 DC ± 10 %
Current consumption	[mA]	300
Protection class		III
Reverse polarity protection		ja *)
Connection external illumination	[V]	24 DC PNP
Type of sensor		CMOS image sensor B/W, VGA resolution 640 x 480

Inputs	
Trigger	internal external; 24 V PNP to IEC 61131-2 type 1 via RS-232, TCP/IP or EtherNet/IP

Outputs		
Output		max. 2 (configurable) / 24 V PNP
Max. current load per output	[mA]	100

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Voltage drop	[V]	< 2					
Short-circuit protection		yes					
Overload protection		yes					

Range							
Operating distance	[mm]	75	100	200	400	1000	2000
Field of view size	[mm]	15 x 11	20 x 15	40 x 30	80 x 60	200 x 150	400 x 300
Omnidirectional reading		yes					
inclination to the image plane		≤ 45°					
readings	[Hz]	≤ 20					
Motion speed	[m/s]	≤ 7					

Software / programming		
Parameter setting options		via 2 pushbuttons and 10-segment display or via PC / notebook with operating software

Interfaces		
parameter setting interface		Ethernet TCP/UDP/IP; 10Base-T / 100Base-TX
Process interface		Ethernet TCP/IP, EtherNet/IP, RS-232
IP address		192.168.0.79
subnet mask		255.255.255.0 (Class C)
gateway IP address		192.168.0.201
MAC address		see type label

Environment		
Ambient temperature	[°C]	-10...50
Storage temperature	[°C]	-40...85
Protection		IP 67

Tests / approvals			
EMC		radiation of interference	to EN 61326
		noise immunity	to EN 61326
MTTF	[Years]	94	
Shock resistance		IEC 60028-2-27:	
Vibration resistance		IEC 60028-2-6:	

Mechanical data		
Housing materials		housing: diecast zinc powder-coated; window: glass; LED window: polycarbonate
Weight	[kg]	0.43

Displays / operating elements		
Display		Function display 3 x LED green
		4 x LED yellow
		Display unit / status 4-digit 10-segment display

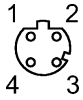| **Electrical connection**		
Connection		M12 plug, 8 poles
		M12 socket, 4 poles

Wiring
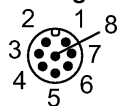
RS-232: Process connection
1:      U+
2:      trigger input
3:      0 V
4:      Switching output 1 (code evaluation) / Trigger output (with external illumination)
5:      RxD RS-232
6:      TxD RS-232

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7:	Switching output 2 (ready signal)	
8:	GND RS-232 (electrically separated up to 50 V)	

Ethernet: parameter setting/process connection
1:	TxD+
2:	RxD+
3:	TxD-
4:	RxD-

Other technical data

Integrated lighting	red light (625 nm) segmented in 4 areas (can be activated individually via the PC operating program)
Laser marking	red, laser protection class 2 to DIN EN 60825-1

Accessories

Accessories (optional)	Operating software; Mounting accessories

Remarks

Remarks	cULus - Class 2 source required *) The voltage on pins 2, 4, 5, 6, 7 and 8 must not exceed the supply voltage on pin 1 (U+) (see operating instructions).
Pack quantity [piece]	1

Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.