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Multi-protocol – IO-Link Masters (60 mm, M12 Power), 4 Digital Inputs, 8 IO-Link Channels with M12 L-Coded Power Supply Connection, PROFINET or EtherNet/IP

Product Description	
Type	0980 ESL 399-121
	NEW!  PROFINET EtherNet/IP IO-Link
Description	LioN-P Multi-protocol module, PROFINET or EtherNet/IP device, 4 digital input channels, 8 IO-Link channels, M12 LAN connection, 4-poles, D-coded, M12 L-coded power supply, 5-poles
Order No.	934879004
Technical Data	
Protection Degree	IP65, IP67, IP69K (only if mounted and locked in combination with Hirschmann/Lumberg connector)
Ambient Temperature (Operation)	-20 °C to +70 °C
Dimensions (W x H x D)	59.6 x 30.7 x 200 (mm)
Weight	500 g
Housing Material	Metal, Zinc Die-cast
Bus System	
Protocol	PROFINET IO Device/EtherNet/IP IO Device
Connection	M12 LAN connection, 4-poles, D-coded
Transmission Rate	Fast Ethernet (100 Mbit/s), Full Duplex
Rotary Address Switches	No
Power Supply	
Nominal Voltage	24 V DC (SELV/PELV)
Nominal Voltage Range	18 to 30 V DC
Connection	M12, L-coded, 5-poles
Current Carrying Capacity of Connector	16 A
Current Consumption (typ.)	180 mA (+/-20% at 24 V DC)
IO-Link Master Channels	
Number of Channels	8
Connection	M12, 5-poles, A-coded
Number of A Ports (IOL)	4 (X1 to X4)
Number of B Ports (IOL)	4 (X5 to X8)
Nominal Voltage (IOL)	24 V DC via US (system power supply)
Nominal Current C/Q (Pin 4)	500 mA
Nominal Current L+/L- (Pin 1 and 3)	500 mA
Nominal Current Uaux (Pin 2, B Ports)	max. 2 A per port
Input Channels	
Number of Channels	max. 12, 4 x (Pin 2, fixed) + 8 x (Pin 4, configurable)
Connection	M12, 5-poles, A-coded
Channel Type	Type 1 acc. to IEC 61131-2
Nominal Voltage	24 V DC via US (system power supply)
Sensor Current Supply	500 mA per Port via L+/L-
Sensor Type	PNP
Output Channels	
Number of Channels	max. 12, 8 x (Pin 4, configurable) + 4 x (Uaux, configurable)
Connection	M12, 5-poles, A-coded
Channel Type	p-switching
Nominal Voltage	24 V DC via Uaux (actuator power supply)
Output Current per Channel	Pin 4: max. 500 mA/Uaux: max. 2 A
Output Current per Module	max. 9 A
Protective Circuit	Electronicaly: Overload protection, short-circuit protection
Galvanically Isolated	Pin 4: No/Uaux: Yes

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Multi-protocol – IO-Link Masters (60 mm, M12 Power), 4 Digital Inputs, 8 IO-Link Channels with M12 L-Coded Power Supply Connection, PROFINET or EtherNet/IP

Diagnostic Indication | 0980 ESL 399-121

LED	Indicator	Condition
1...8 A	Yellow	Channel status
1...8 DIA A	Red	Periphery error
1...8 B	White	Channel status
1...8 DIA B	Red	Periphery error
1...8 I/O-Link	Green Green blinking Off	No I/O-Link device connected I/O-Link communication available Port is not configured as I/O-Link
P1 Lnk/Act	Green Green blinking Off	Connection to an Ethernet device I/O device exchanging data No connection to another device
P2 Lnk/Act	Green Yellow blinking Off	Connection to an Ethernet device I/O device exchanging data No connection to another device
BF	Red Off	Bus error, no data exchange with I/O controller No error message
DIA	Red Red blinking Off	Common indicator for periphery errors Firmware update No error message
MS (Module status)	Green Green blinking Red/green blinking Red blinking Off	Device is ready for operating Wrong configuration Self test is running Firmware update IP address is available
NS (Network status)	Green blinking Green Red blinking Red Red/green blinking Off	IP address is available Connection to master is available At least one connection has timed out IP address is already being used by another device Self test is running Device is switched off/device has no IP address
U_S	Green	Voltage 19 V <= U_S <= 30 V
U_{AUX}	Green Red	Voltage 19 V <= U_L <= 30 V U_L Voltage < 19 V or U_L > 30 V

Pin Assignment

M12 IO-Link Port Type A (X01...X04), A-coded

1 = +24 V
2 = IN
3 = GND
4 = C/Q
5 = n.c.

M12 IO-Link Port Type B (X05...X08), A-coded

1 = +24 V
2 = +24 V AUX/OUT
3 = GND
4 = C/Q
5 = GND AUX/OUT

M12 Power Supply, L-coded

1 = +24 V
2 = GND AUX
3 = GND
4 = +24 V AUX
5 = FE

M12 PROFINET/EtherNet/IP, D-coded

1 = TD+
2 = RD+
3 = TD-
4 = RD-

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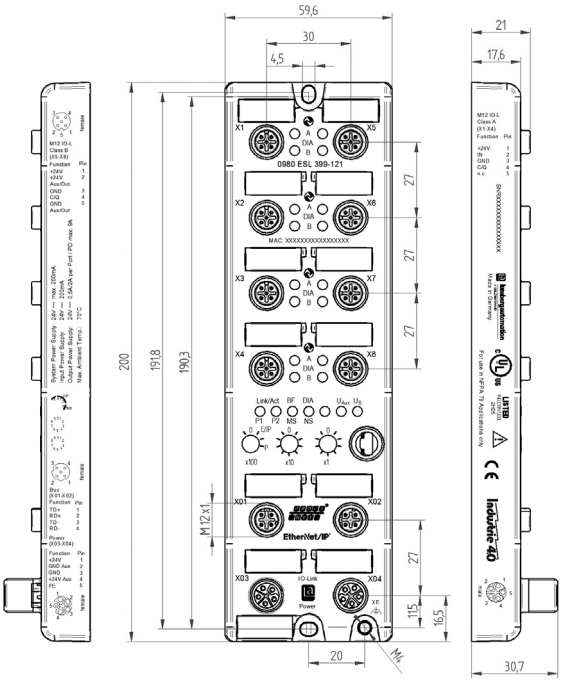
Technical Drawing

0980 ESL 399-121



The application of these products in harsh environments should always be checked before use.
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