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					
Туре	0980 ESL 399-121				
	EtherNet/IP OID				
	197 and to marking 20				
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				
Drder 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)				
Veight	500 g				
Housing Material	Metal, Zinc Die-cast				
Bus System	DDDEINET ID Davies /Ethewhet/ID ID Davies				
Protocol Connection	PROFINET IO Device/EtherNet/IP IO Device				
Fransmission Rate	M12 LAN connection, 4-poles, D-coded				
	Fast Ethernet (100 Mbit/s), Full Duplex No				
Rotary Address Switches Power Supply	INU				
Iominal Voltage	24 V DC (SELV/RELV)				
	24 V DC (SELV/PELV)				
Iominal Voltage Range Connection	18 to 30 V DC				
Current Carrying Capacity of Connector	M12, L-coded, 5-poles				
Current Consumption (typ.)	180 mA (+/-20% at 24 V DC)				
O-Link Master Channels	100 IIIA (±/-20 // at 24 V 00)				
lumber of Channels	8				
Connection	M12, 5-poles, A-coded				
Number of A Ports (IOL)	4 (X1 to X4)				
Number of B Ports (IOL)	4 (X1 to X4) 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				
nput Channels					
lumber 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				
Iominal Voltage	24 V DC via US (system power supply)				
Sensor Current Supply	500 mA per Port via L+/L-				
Sensor Type	PNP				
Dutput Channels					
lumber 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)				
Dutput Current per Channel	Pin 4: max. 500 mA/Uaux: max. 2 A				
Dutput 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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Diagnostic Indication | 0980 ESL 399-121

LED	Indicator	Condition	
18 A	Yellow	Channel status	
18 DIA A	Red	Periphery error	
18 B	White	Channel status	
18 DIA B	Red	Periphery error	
18 I/0-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	
Us	Green	Voltage 19 V <= Us <= 30 V	
Uaux	Green Red	Voltage 19 V <= UL <= 30 V UL Voltage < 19 V or UL > 30 V	

Pin Assignment

M12 IO-L	ink Port Type A (X01X04), A-coded	M12 IO-Link Port Type B (X05X08), A-coded		
$3 \\ 0 \\ 0 \\ 0 \\ 2 \\ 5 \\ 1$	1 = +24 V 2 = IN 3 = GND 4 = C/Q 5 = n.c.	$3 \qquad 4 \qquad 0 \qquad 0$	1 = +24 V 2 = +24 V AUX/OUT 3 = GND 4 = C/Q 5 = GND AUX/OUT	
M12 Power Supply, L-coded		M12 PROFINET/EtherNet/IP, D-coded		
$ \begin{array}{c} 1 \\ 5 \\ 3 \\ 4 \end{array} $	1 = +24 V 2 = GND AUX 3 = GND 4 = +24 V AUX 5 = FE	3 0 0 2 1	1 = TD+ 2 = RD+ 3 = TD- 4 = RD-	

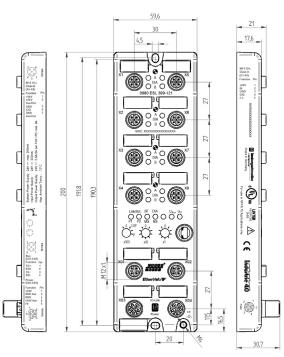
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Technical Drawing

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