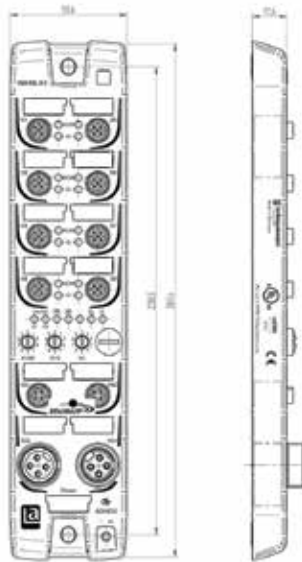# LioN-R EtherNet/IP I/O Rugged Modules with 8 Digital Inputs and 8 Digital Outputs

Type	0980 ESL 813-EIP 8DI/8DO-M12-R		
Product Description	LioN-R Digital input and output module, 8 digital input channels and 8 output channels with galvanic isolation, EtherNet/IP devices, rotary address switches for setting addresses, M12 LAN connector, D-coded		
Order Number	934 691-003		

Diagnostic indiction			
LED	**Indication**	**Condition**	
1...8 A	White	Channel status	
1...8 DIA A	Red	Periphery error	
1... 8 B	White	Channel status	
1... 8 DIA B	Red	Periphery error	
P1 Lnk/Act	Green Yellow flashing Off	Connection to an Ethernet device I/O device exchanging data No connection to any other device	
P2 Lnk/Act	Green Green flashing Off	Connection to an Ethernet device I/O device exchanging data No connection to any other devices	
MS (Module status)	Green Green flashing Red/Green flashing Red flashing Off	Device is ready for operating Wrong configuration Self test is running Firmware update Device is switches off	
NS (Network status)	Green flashing Green Red flashing Red Red/Green flashing 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 Red	Voltage 18 V<= US<=30 V Voltage US<18 V or US>30 V	
UL	Green Red	Voltage 18 V<= US<=30 V Voltage US<18 V or US>30 V	

Technical modifications reserved.

Bit assignment								
Bit	7	6	5	4	3	2	1	0
M12 Input 8DI								
Byte 0	4B	4A	3B	3A	2B	2A	1B	1A
M12 Input 8DO								
Byte 0	8B	8A	7B	7A	6B	6A	5B	5A

Pin assignment	

LAN connection M12, D-coded

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

Power supply 7/8"

1 = +24 V Actuators
2 = +24 V Logic/Sensor
3 = GND (0 V) Logic/Sensor
4 = GND (0 V) Actuators
Housing = PE

Input/Output M12

1 = +24 V
2 = IN B
3 = GND (0 V)
4 = IN A
5 = earth
Housing = PE

Part number	Order number
0980 ESL 813-EIP 8DI/8DO-M12-R	934 691-003

LioN-R EtherNet/IP I/O Rugged Modules with 8 Digital Inputs and 8 Digital Outputs

Product Description	
Type	0980 ESL 813-EIP 8DI/8DO-M12-R

Technical Data	
Protection Class	IP67
Operating Temperature Range	-10°C to +60°C
Weight	605 g
Housing Material	Metal (diecast zinc)

Bus System	
Transmission Rate	10/100 Mbs
Address Range	0 to 255
Default Address	0

Inputs	
Rated Input Voltage	24 V DC
Sensor Type	PNP (source)
Power Consumption of Sensor	Max. 200 mA
Reverse Polarity Protection	Yes
Short Circuit-proof	Yes
Number of Digital Channels	8
Status Indicator	LED white per channel
Diagnostic Indicator	LED red per port

Actuator Power Supply UL	
Rated Output Current	25 V DC
Voltage Range	19 to 30 V DC
Reverse Polarity Protection	Yes/antiparallel diode
Indicator	LED white

Outputs	
Rated Output Current	1.6 A per channel
Short Circuit-proof	Yes
Max. Current Carrying Capacity	9 A per module
Overload-proof	Yes
Number of Digital Channels	8
Channel Type N.O.	p-switching
Status Indicator	LED white per channel
Diagnostic Indicator	LED red per port
Galvanic Isolation from Electronics	Yes

Included in Delivery	
M12 Dust Covers	4 pieces
Attachable Labels	10 pieces

The use of these products in aggressive media should be verified in each case. Technical modifications reserved.
Certifications have been applied for UL and CSA.