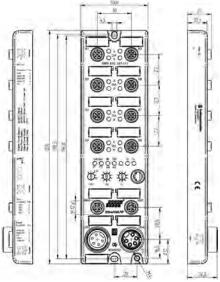


LioN-Power Active I/O M12, 7/8" Power, Multi-protocol, 8DI/8DO





Туре	0980 ESL 393-111	
Product Description	LioN-P Multi-protocol module, PROFINET or EtherNet/IP device, 8 digital input a 8 digital output channels with galvanic isolation, M12 LAN connection, 4-poles, D-coded, 7/8" power supply, 5-poles	
Diagnostic indiction		

Diagnostic indiction Section S			The state of the s	
18 A Yellow Channel status 18 DIA A Red Peripheral fault 18 B White Channel status 18 DIA B Red Peripheral fault Connection to an Ethernet subscriber In device is in data exchange Off No connection to another subscriber Connection to an Ethernet subscriber Connection to an Ethernet subscriber In device is in data exchange No connection to another subscriber Connection to an Ethernet subscriber In device is in data exchange No connection to another subscriber In device is in data exchange No connection to another subscriber In device is in data exchange No connection to another subscriber Red Bus fault, no communication No fault present Collective display peripheral fault Firmware update Off No fault present Green Green Blinking Incorrect Configuration Self-test is carried out Firmware update Device is switched off IP address present Connection to master is present At least one connection has timed out IP address present Connection to master is present At least one connection has timed out IP address is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device Self-test is carried out Paddress is already used by another device self-test is carried out Paddress is already used by another device self-test is carried out Paddress is already used by another device self-test is carried out Paddress is already used by another device self-test is carried out Paddress is already used b	Diagnostic indiction			
18 DIA A Red Peripheral fault 18 DIA B White Channel status 18 DIA B Red Peripheral fault Connection to an Ethernet subscriber Off No connection to another subscriber No connection to another subscriber Off No connection to another subscriber Off No fault present	LED	Indication	Condition	
18 B White Channel status 18 DIA B Red Peripheral fault P1 Lnk/Act Green Connection to an Ethernet subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off No connection to another subscriber IO device is in data exchange Off IO device is in data exchange Off IO device is in data exchange IO device io data exchange IO device io data exchange IO device in data exchange IO device io data exchange I	18 A	Yellow	Channel status	
18 DIA B Red Green Green Connection to an Ethernet subscriber IO device is in data exchange Off No connection to an Ethernet subscriber Green Green Green Connection to an Ethernet subscriber IO device is in data exchange No connection to an Ethernet subscriber P2 Lnk/Act P2 Lnk/Act Green Green Red Bus fault, no communication No fault present Red Collective display peripheral fault Firmware update Off No fault present Green Module Status) MS (Module Status) Red-Green blinking Green blinking Firmware update Off Red Self-test is carried out Firmware update Off Device is switched off IP address present Connection to master is present At least one connection has timed out IP address is already used by another device Self-test is carried out Fed blinking Off Device is switched off Us Green Voltage 19V <=U_s <= 30V	18 DIA A	Red	Peripheral fault	
Green Green Connection to an Ethernet subscriber IO device is in data exchange No connection to another subscriber Green Connection to an Ethernet subscriber IO device is in data exchange No connection to an Ethernet subscriber IO device is in data exchange IO device is in data exchange No connection to another subscriber IO device is in data exchange IO device is indexion to another subscriber IO device is indexion to another index	18 B	White	Channel status	
P1 Lnk/Act Green blinking Off Off Off Off Off Off Off Off Off Of	18 DIA B	Red	Peripheral fault	
P2 Lnk/Act Yellow blinking Off Off No connection to another subscriber Be Be Red Off Off No fault present Red Collective display peripheral fault Firmware update Off No fault present Green Module is ready Incorrect Configuration Self-test is carried out Firmware update Off Device is switched off Red blinking Green blinking Off Device is switched off Red Red blinking Green Red	P1 Lnk/Act	Green blinking	IO device is in data exchange	
DIA Red Red Collective display peripheral fault Pirmware update No fault present Green Green Green blinking Off No fault present Green Module is ready Incorrect Configuration Red-Green blinking Red blinking Firmware update Off Device is switched off Green blinking Firmware update Off Device is switched off IP address present Green Connection to master is present At least one connection has timed out P address is already used by another device Red blinking Red-Green blinking Off Device is switched off Us Voltage 19V <=U_s<= 30V Us Voltage 19V <=U_l<= 30V Voltage 19V <=U_l<= 30V	P2 Lnk/Act	Yellow blinking	IO device is in data exchange	
DIA Red blinking Off No fault present Green Green blinking Incorrect Configuration Red-Green blinking Self-test is carried out Firmware update Off Device is switched off NS (Network Status) Red Green blinking Firmware update Off Device is switched off Green blinking IP address present Connection to master is present At least one connection has timed out IP address is already used by another device Red Blinking IP address is already used by another device Self-test is carried out Off Device is switched off Us Green Voltage 19V <=U_s<= 30V Us Voltage <19V or Us> 30V Voltage 19V <=U_l<= 30V	BF	1.00		
Green blinking Incorrect Configuration Red-Green blinking Self-test is carried out Firmware update Off Device is switched off	DIA	Red blinking	Firmware update	
See a Connection to master is present	MS (Module Status)	Green blinking Red-Green blinking Red blinking	Incorrect Configuration Self-test is carried out Firmware update	
$ \begin{array}{c cccc} & \text{Red} & & \text{U_s Voltage} < 19V \text{ or U_s} > 30V \\ \hline \textbf{U_L} & \text{Green} & \text{Voltage } 19V < = U_L <= 30V \\ \end{array} $	NS (Network Status)	Green Red Red blinking Red-Green blinking	Connection to master is present At least one connection has timed out IP address is already used by another device Self-test is carried out	
U _L Green Voltage 19V <= U _L <= 30V	U _s			
	UL	Green Voltage		

Bit assignm	Bit assignment State of the sta							
Bit	7	6	5	4	3	2	1	0
	Input Data: 8DI							
Byte 0	4B	4A	3B	3A	2B	2A	1B	1A
	Output Data: 8DO							
Byte 1	8B	8A	7B	7A	6B	6A	5B	5A

Pin assignment

M12 I/O port, A-coded

3004

1 = +24V 2 = In/Out B 3 = GND 0V 4 = In/Out A Power supply 7/8"

2 = GND 0V 3 = FE 4 = +24V 5 = +24V UL

1110"

1 = GND UL

300

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

M12 PROFINET, EtherNet/IP, D-coded

Part number

Order number

0980 ESL 393-111

934882003



LioN-Power Active I/O M12, 7/8" Power, Multi-protocol, 8DI/8DO

Environmental Temperature	Technical Data			
PA/TPU	Environmental Temperature	-20 °C to +70 °C (Operation)		
Contact M12 A, D-coded CuSn, Gold-plated 7/8° CuZn, Gold-plated 7/8°	Housing Material	Metal Zinc Die-cast		
T/8" Cu2n, Gold-plated	Contact Bearer	PA/TPU		
Mechanical Data 520 g Weight 520 g Protection Class (IEC 60529) IP65, IP67 (only if mounted and locked in combination with Hirschmann/Lumberg connector) Module Supply Rated Voltage 24V DC Voltage Range 19 to 30V DC Nominal Current 9 A Connection Type 7/8" power connector, 5 poles Number 2 Bus-System Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Contact			
Weight 520 g Protection Class (IEC 60529) IP65, IP67 (only if mounted and locked in combination with Hirschmann/Lumberg connector) Module Supply IP65, IP67 (only if mounted and locked in combination with Hirschmann/Lumberg connector) Woltage 24V DC Voltage Range 19 to 30V DC Nominal Current 9 A Connection Type 7/8" power connector, 5 poles Number 2 Bus-System PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	The state of the s	FKM		
Protection Class (IEC 60529) Module Supply Rated Voltage	Mechanical Data			
Module Supply 24V DC Voltage Range 19 to 30V DC Nominal Current 9 A Connection Type 7/8" power connector, 5 poles Number 2 Biss-System Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Weight	520 g		
Rated Voltage 24V DC Voltage Range 19 to 30V DC Nominal Current 9 A Connection Type 7/8" power connector, 5 poles Number 2 Bus-System PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Protection Class (IEC 60529)	IP65, IP67 (only if mounted and locked in combination with Hirschmann/Lumberg connector)		
Voltage Range 19 to 30V DC Nominal Current 9 A Connection Type 7/8" power connector, 5 poles Number 2 Bus-System Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O.	Module Supply			
Nominal Current 9 A Connection Type 7/8" power connector, 5 poles Number 2 Bus-System PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Rated Voltage	24V DC		
Connection Type 7/8" power connector, 5 poles Number 2 Bus-System Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Voltage Range	19 to 30V DC		
Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Nominal Current	9 A		
Bus-System Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Connection Type	7/8" power connector, 5 poles		
Network PROFINET, EtherNet/IP Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching		2		
Transmission Rate 10/100 Mbit/s Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Bus-System			
Address Range 0 to 255 (not applicable if in PROFINET mode) Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Network	· ·		
Connection Type M12 LAN connection, 4 poles, D-coded Number 2 Outputs 8 Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Transmission Rate	10/100 Mbit/s		
Number 2 Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Address Range	0 to 255 (not applicable if in PROFINET mode)		
Outputs Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Connection Type	M12 LAN connection, 4 poles, D-coded		
Number of Digital Channels 8 Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Number	2		
Actoric Current 2 A per channel Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Outputs			
Actoric Current (max.) 9 A Short-circuit Proof yes Channel Type N.O. p-switching	Number of Digital Channels	8		
Short-circuit Proof yes Channel Type N.O. p-switching	Actoric Current	2 A per channel		
Channel Type N.O. p-switching	Actoric Current (max.)	9 A		
	Short-circuit Proof	yes		
Status Indicator LED white or vellow per channel	Channel Type N.O.	p-switching		
=== mino or joint per original	Status Indicator	LED white or yellow per channel		
Diagnostic Indicator LED red per port	Diagnostic Indicator	LED red per port		
Inputs	Inputs			
Number of Digital Channels 8	Number of Digital Channels	8		
Type 3 acc. IEC 61131-2	Туре	Type 3 acc. IEC 61131-2		
Sensor Type PNP	Sensor Type	PNP		
Status Indicator LED white or yellow per channel	Status Indicator	LED white or yellow per channel		
Diagnostic Indicator LED red per port	Diagnostic Indicator	LED red per port		
Sensor Current Supply 200 mA per port	Sensor Current Supply	200 mA per port		

The application of these products in harsh environments should always be checked before use. Specifications subject to alteration.