

# Communication module - IOL MA8 PN DI8



1072838

<https://www.phoenixcontact.com/pc/products/1072838>

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Eight-channel IO-Link master provides convenient configuration of IO-Link devices using web-based management. Supports connectivity to PROFINET IO, MODBUS, and OPC UA. Features eight auxiliary digital inputs, redundant input power supply connections, plug-in push-in terminals.

## Product Description

Provides connectivity to PROFINET, MODBUS TCP, and OPC UA networks. It enables the operation of up to eight IO-Link sensors/actuators and is also used to acquire digital signals. The device is designed for use in systems manufacturing.

## Your advantages

- Web-based management
- Eight-channel IO-Link master
- Diagnostic and status indicators
- Short-circuit and overload protection of the sensor supply
- Plug-in connection terminals, push-in connection technology
- Connections for up to 16 digital sensors

## Commercial Data

Item number	1072838
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DRI7PA
Catalog Page	Page 163 (C-6-2019)
GTIN	4055626765778
Weight per Piece (including packing)	372.5 g
Weight per Piece (excluding packing)	372.5 g
Customs tariff number	85176200
Country of origin	US

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## Technical Data

### Dimensions

Width	45 mm
Height	114.5 mm
Depth	99 mm

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Material specifications

Housing material	Polyamide
Color	gray

### Interfaces

#### PROFINET

No. of channels	2
Connection method	RJ45 jack
Transmission speed	10/100 Mbps (with auto negotiation)
Transmission physics	Ethernet in RJ45 twisted pair

#### PROFINET

Equipment type	PROFINET-Device
System-specific protocols	PROFINET protocols LLDP
	PROFINET protocols MRP client
	PROFINET protocols DCP
	DCE-RPC
Protocols supported	SNMP v1
	HTTP
	TFTP
	FTP
	BootP
	DHCP
	SSH

### Input data

#### Digital

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Number of inputs	8
Connection method	Push-in / plug connection

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Connection technology	3-conductor
Input voltage range "0" signal	0 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	typ. 3.5 mA
Input frequency	0.5 kHz
Protective circuit	Overload protection Short-circuit protection for the sensor supply

## Digital

Input name	Digital inputs
Description of the input	IO-Link ports in digital input (DI) mode
Number of inputs	max. 8 (EN 61131-2 types 1 and 3)
Connection method	Push-in / plug connection
Connection technology	3-conductor
Nominal input voltage $U_{IN}$	24 V DC
Input voltage range "0" signal	8 V DC ... 11.5 V DC (for C/Q pin)
Input voltage range "1" signal	10.5 V DC ... 13 V DC
Sensor current per channel	max. 200 mA (from L+/L-)
Total sensor current	max. 1.6 A (from L+/L-)
Protective circuit	Overload protection; yes Short-circuit protection for the sensor supply; electronic

## IO-Link

Description of the input	Digital inputs (DI)
Connection method	Push-in / plug connection
Nominal input voltage $U_{IN}$	24 V DC
Input voltage range "0" signal	5.2 V DC ... 6.4 V DC
Input voltage range "1" signal	6.8 V DC ... 8 V DC
Nominal input current	typ. 3.5 mA
Sensor current per channel	max. 200 mA (from L+/L-)
Total sensor current	max. 1.6 A (from L+/L-)
Protective circuit	Overload protection; yes Short-circuit protection for the sensor supply; yes

## IO-Link

Number of ports	8
Connection method	Push-in / plug connection
Connection technology	3-conductor

## Output data

### Digital

Maximum output current per channel	200 mA
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### Digital

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Output description	IO-Link ports in digital output (DO) mode
Connection method	Push-in / plug connection
Connection technology	3-conductor
Number of outputs	max. 8
Nominal output voltage	24 V DC
Maximum output current per channel	200 mA
Maximum output current per module	1.6 A
Nominal load, ohmic	4.8 W (120 Ω, at nominal load)
Output voltage when switched off	max. 1 V
Output current when switched off	max. 400 µA
Protective circuit	Overload protection
	Short-circuit protection; yes
Behavior with overload	Shutdown with automatic restart

## Product properties

Type	Stand-Alone
Product type	I/O component

## Electrical properties

### Supply: IO-Link

Nominal voltage for I/O supply	24 V DC
Nominal current for every IO-Link port	max. 200 mA (at C/Q)
	max. 200 mA (at L+/L-)
Protective circuit	Overload protection; yes
Permissible cable length	< 20 m

### Potentials

Supply voltage	24 V DC
Supply voltage range	10.8 V DC ... 30 V DC
Current draw	155 mA

### Supply: Module electronics

Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC
Current consumption	3.7 A

### Supply:

Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC
Current consumption	max. 3.7 A
Typical current consumption	155 mA (at 24 V DC)

## Connection data

### Conductor connection

Connection method	Push-in connection
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Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14
Stripping length	10 mm
Connection method	Push-in connection
Conductor cross section, rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14
Stripping length	10 mm

## Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Degree of protection	IP20
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 %
Permissible humidity (storage/transport)	10 % ... 95 %

## Mounting

Mounting type	DIN rail mounting
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## Approvals

 **UL Listed**  
Approval ID: FILE E 238705

 **cUL Listed**  
Approval ID: FILE E 238705

**PROFIBUS**  
Approval ID: Z12760

**cULus Listed**

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## Classifications

### ECLASS

ECLASS-9.0	27242608
ECLASS-10.0.1	27242608
ECLASS-11.0	27242608

### ETIM

ETIM 8.0	EC001604
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### UNSPSC

UNSPSC 21.0	32151600
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