IOL MA8 PN DI8 - Communication module

1072838

https://www.phoenixcontact.com/us/products/1072838

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

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	250 pc
Minimum order quantity	1 pc
Sales key	DR04
Product key	DRI7PA
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

Technical data

Dimensions

Width	45 mm
Height	114.5 mm
Depth	99 mm

Notes

Note on application

Note on application	Only for industrial use

Utilization restriction

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

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
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
Cycle Time	min. 4 ms (IO-Link cycle time)

Output data

Digital:

Maximum output current per channel	200 mA

Digital

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

Product type	I/O component
Product family	Stand-alone
Type	Stand-alone

Electrical properties

Maximum power dissipation for nominal condition	4.4 W

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-)
Permissible cable length	< 20 m
Protective circuit	Overload protection; yes

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)

Electrical isolation/isolation of the voltage ranges

Test voltage: 24 V supply/Ethernet	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply (US) / FE	500 V AC, 50 Hz, 1 min
Test voltage: Ethernet/FE	500 V AC, 50 Hz, 1 min
Test voltage: Ethernet/Ethernet	500 V AC, 50 Hz, 1 min

Connection data

Conductor connection

Connection method	Push-in connection
Conductor cross-section rigid	0.2 mm² ... 2.5 mm²
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 14
Stripping length	10 mm
Connection method	Push-in connection
Conductor cross-section, rigid	0.2 mm² ... 2.5 mm²
Conductor cross-section, flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 14
Stripping length	10 mm

Environmental and real-life conditions

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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1072838

UL Listed
Approval ID: E238705

cUL Listed
Approval ID: E238705

Classifications

ECLASS

ECLASS-13.0	27242608
ECLASS-15.0	27242608

ETIM

ETIM 9.0	EC001604

UNSPSC

UNSPSC 21.0	32151600

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com