

I/O module - ILB PN 24 DI16 DIO16-2TX - 2878146

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Inline, Block IO, PROFINET, RJ45 socket, Digital inputs: 32, 24 V DC, 3-conductor, Digital outputs: 16, 24 V DC, 500 mA, 2-wire, Degree of protection IP20, including Inline connector

Product Features

- 16/32 inputs, 24 V DC
- 16 outputs, 24 V DC, 500 mA
- 2 RJ45 sockets angled 45°



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	560.8 g
Custom tariff number	85389091
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	156 mm
Height	141 mm
Depth	57 mm
Note on dimensions	Specifications with connectors

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	max. 85 % ((non-condensing))

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Technical data

Ambient conditions

Air pressure (operation)	80 kPa ... 108 kPa (up to 2000 m above mean sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above mean sea level)
Degree of protection	IP20

Interfaces

Fieldbus system	PROFINET
Designation	PROFINET
Connection method	RJ45 socket
Transmission speed	10/100 MBit/s (with auto negotiation)
Transmission physics	Copper

PROFINET

Device function	PROFINET device
Specification	Version 1.1
Update rate	min. 1 ms

Digital inputs

Input name	Digital inputs
Description of the input	16 fixed and 16 freely selectable
Connection method	Spring-cage connection
	3-conductor
Number of inputs	32
Typical response time	approx. 500 µs
Protective circuit	Short-circuit protection, overload protection of the sensor supply
Input characteristic curve	IEC 61131-2 type 1
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC

Digital outputs

Output name	Digital outputs
Connection method	Spring-cage connection
	2-wire
Number of outputs	16
Protective circuit	Short-circuit and overload protection
Nominal output voltage	24 V DC
Maximum output current per channel	500 mA
Nominal load, inductive	12 VA (1.2 H, 50 Ω)
Nominal load, lamp	12 W

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Digital outputs

Nominal load, ohmic	12 W (48 Ω)
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Power supply for module electronics

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Supply current	60 mA
Current consumption	60 mA

General

Mounting type	DIN rail
Net weight	500 g
Note on weight specifications	with connectors
Diagnostics messages	Short-circuit / overload of the digital outputs Message in the diagnostics register
	Short-circuit, sensor supply Message in the diagnostics register
	Undervoltage Power supply for sensors Message in the diagnostics register
Mounting type	NS 35/7,5

Standards and Regulations

Conformity with EMC directives	EN 55011:1998+A1:1999 Class A
Noise emission	Industrial environment
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 25g
Connection in acc. with standard	CUL

Classifications

eCl@ss

eCl@ss 4.0	27250302
eCl@ss 4.1	27250302
eCl@ss 5.0	27250302
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

ETIM

ETIM 2.0	EC001430
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Classifications

ETIM

ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

UL Recognized 

cUL Recognized 

cULus Recognized 

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Accessories

Accessories

Data cable by the meter

Cable - FL CAT5 HEAVY - 2744814



CAT5-SF/UTP cable (J-02YS(ST)C HP 2 x 2 x 24 AWG), heavy-duty installation cable, 2 x 2 x 0.22 mm², solid conductor, shielded, outer sheath: 7.8 mm diameter, inner sheath: 5.75 mm ± 0.15 mm diameter

Network cable - FL CAT5 FLEX - 2744830



CAT5-SF/UTP cable (J-LI02YS(ST)C H 2 x 2 x 26 AWG), light-duty, flexible installation cable 2 x 2 x 0.14 mm², stranded, shielded, outer sheath: 5.75 mm ± 0.15 mm diameter

End block

End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



Plug

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Accessories

RJ45 connector - FL PLUG RJ45 GR/2 - 2744856



RJ45 connector, shielded, with bend protection sleeve, 2 pieces, gray for straight cables, for assembly on site. For connections that are not crossed, it is recommended that you use the connector set with gray bend protection sleeve.

RJ45 connector - FL PLUG RJ45 GN/2 - 2744571



RJ45 connector, shielded, with bend protection sleeve, 2 pieces, green for crossed cables, for assembly on site. For connections that are crossed, it is recommended that the connector set with green bend protection sleeves is used.

Terminal marking

Insert strip - ESL 62X10 - 0809492



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 10 mm

Flat zack marker sheet - ZBFM 6/WH:UNBEDRUCKT - 0803618



Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5 x 5.5 mm

Universal tools

Assembly tool - FL CRIMPTOOL - 2744869



Crimping pliers, for assembling the RJ45 plugs FL PLUG RJ45..., for assembly on site

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Accessories

Spare parts

Inline connector - IB IL SCN-PWR IN-CP - 2727637



Connector, colored, for Inline power and segment terminal blocks

Inline connector - IB IL SCN-12-ICP - 2727611



Connector, color coded, for digital 4, or 16-channel Inline input terminals

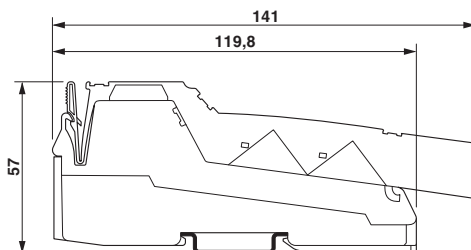
Inline connector - IB IL SCN-12-OCP - 2727624



Connector, colored identification, for digital 4, or 16-channel Inline output terminal blocks

Drawings

Dimensional drawing



Connection diagram



Mouser Electronics

Authorized Distributor

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