

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



2878146

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Inline, Block IO, PROFINET, RJ45 jack, Digital inputs: 32 (16 fixed and 16 freely selectable), 24 V DC, connection technology: 3-conductor, Digital outputs: 16, 24 V DC, connection technology: 2-conductor, degree of protection: IP20, including Inline connector

Your advantages

- 16/32 inputs, 24 V DC
- 2 RJ45 jacks at a 45° angle
- 16 outputs, 24 V DC, 500 mA

Commercial data

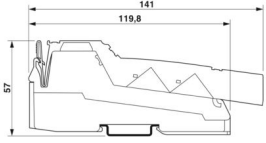
Item number	2878146
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR01
Product key	DRI1AA
GTIN	4046356048484
Weight per piece (including packing)	560.8 g
Weight per piece (excluding packing)	500 g
Customs tariff number	85389091
Country of origin	DE

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Technical data

Dimensions

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

Notes

Utilization restriction

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

PROFINET

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

System properties

PROFINET

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

Input data

Digital:

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Number of inputs	32 (16 fixed and 16 freely selectable)
Connection method	Spring-cage connection
Connection technology	3-conductor
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC

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Input voltage range "1" signal	15 V DC ... 30 V DC
Nominal input voltage U_{IN}	24 V DC
Typical response time	approx. 500 μ s
Protective circuit	Short-circuit protection, overload protection of the sensor supply

Output data

Digital:

Output name	Digital outputs
Connection method	Spring-cage connection
Connection technology	2-conductor
Number of outputs	16
Protective circuit	Short-circuit and overload protection
Maximum output current per channel	500 mA
Nominal output voltage	24 V DC
Nominal load, inductive	12 VA (1.2 H, 50 Ω)
Nominal load, lamp	12 W
Nominal load, ohmic	12 W (48 Ω)

Product properties

Product type	I/O component
Product family	Inline
Type	Block design Inline
Scope of supply	including Inline connector
No. of channels	32
Diagnostics messages	Short-circuit or 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

Electrical properties

Potentials: Communications power (U_L)

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	70 mA

Potentials: Sensor supply (U_{S1})

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	4 A

Potentials: Sensor supply (U_{S2})

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Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	4 A

Potentials: Power supply to the actuator (U_{A1})

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	4 A

Potentials: Power supply to the actuator (U_{A2})

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	4 A

Potentials

Power supply	max. 8 A
Current draw	70 mA

Connection data

Connection technology

Connection name	Inline connector
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Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Degree of protection	IP20
Air pressure (operation)	80 kPa ... 108 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	max. 85 % (non-condensing)

Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	25g

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Standards and regulations

Noise emission	Industrial environment
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Mounting

Mounting type	NS 35/7,5
	DIN rail mounting

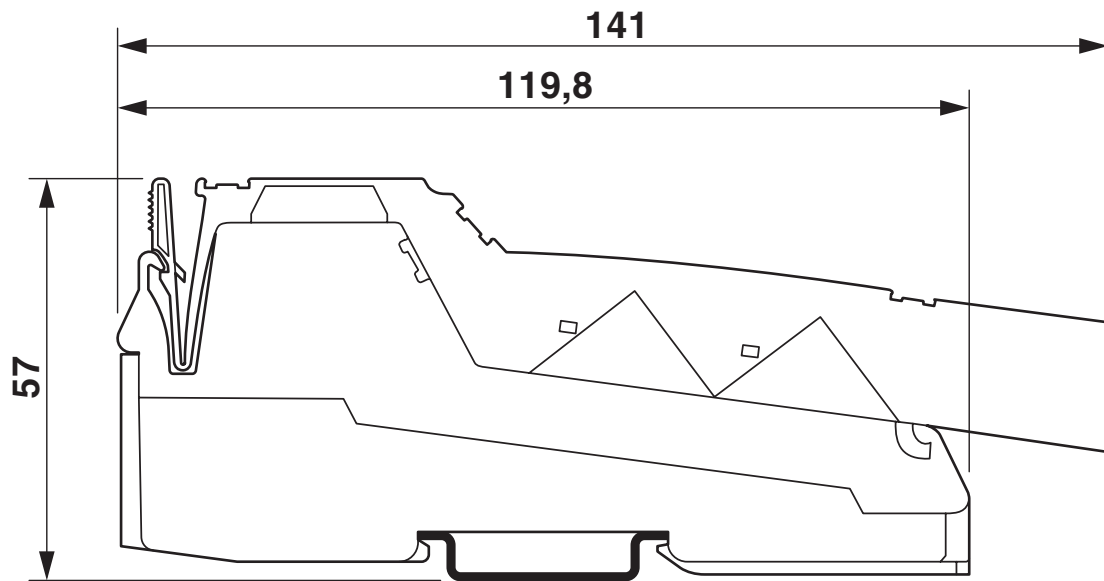
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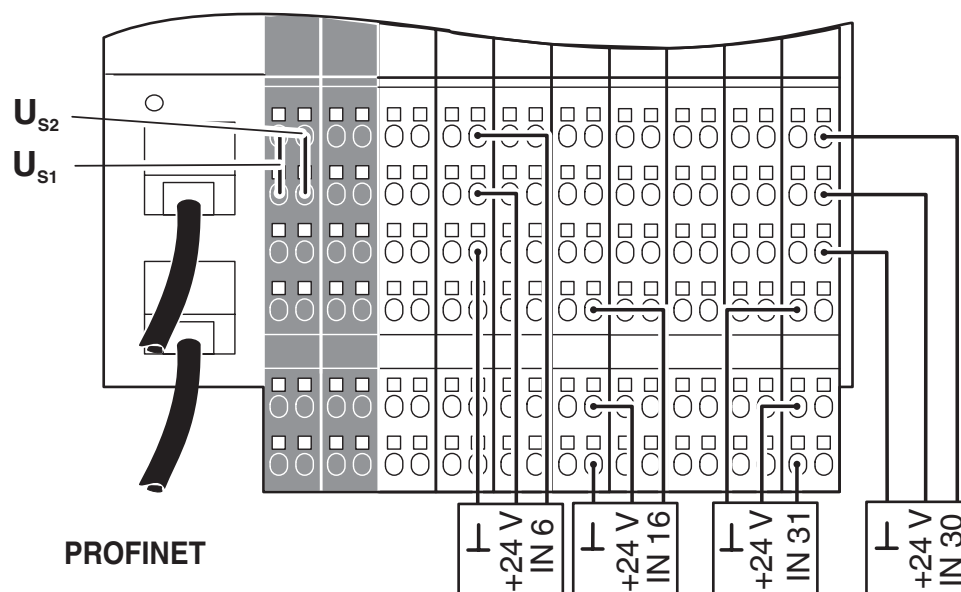
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Drawings

Dimensional drawing



Connection diagram



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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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