

# IB IL 24 DI 8/HD-ECO - Digital module



2702792

<https://www.phoenixcontact.com/us/products/2702792>

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.



Inline, Digital input terminal, Digital inputs: 8, 24 V DC, connection technology: 1-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector

## Product description

The terminal is designed for use within an Inline station. It is used to acquire digital signals. Inline ECO terminals are approved for the temperature range from 0°C to +55°C. The electronics base and Inline connector are supplied as standard.

## Your advantages

- 8 digital inputs
- Connection of sensors in 1-conductor technology

## Commercial data

Item number	2702792
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI131
GTIN	4055626355221
Weight per piece (including packing)	74 g
Weight per piece (excluding packing)	60 g
Customs tariff number	85389099
Country of origin	DE

# IB IL 24 DI 8/HD-ECO - Digital module

2702792

<https://www.phoenixcontact.com/us/products/2702792>

## Technical data

### Dimensions

Dimensional drawing	
Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

### Notes

#### Note on application

Note on application	Only for industrial use
---------------------	-------------------------

### Material specifications

Color (Housing)	green (RAL 6021)
-----------------	------------------

### Interfaces

#### Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	500 kbps

### System properties

#### Programming data (LocalbusSlave)

Length code (hex)	81
ID code (dec.)	190
Length code (dec)	129
Process data channel	8 bit
Input address area	1 Byte
Output address area	0 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	8 bit

#### Fieldbus data telegram (PROFIBUS)

Required parameter data	1 Byte
Required configuration data	4 Byte

## Input data

### Digital:

Input name	Digital inputs
Description of the input	EN 61131-2 types 1 and 3
Number of inputs	8
Connection method	Spring-cage connection
Connection technology	1-conductor
Input voltage	24 V DC
Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	11 V DC ... 30 V DC
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	typ. 2.4 mA
Typical input current per channel	2.4 mA
Typical response time	1 ms
Delay at signal change from 0 to 1	1 ms
Delay at signal change from 1 to 0	1 ms

## Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of supply	including Inline connector
No. of channels	8
Operating mode	Process data mode with one byte

### Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

## Electrical properties

Maximum power dissipation for nominal condition	0.8 W
---	-------

### Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 30 mA

### Potentials: Segment circuit supply ( $U_S$ )

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 5.5 mA

### Electrical isolation/isolation of the voltage ranges

Test voltage: 7.5 V supply (bus logics)/24 V supply (I/O)	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logic)/functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 50 Hz, 1 min

## Connection data

### Connection technology

Connection name	Inline connector
-----------------	------------------

### Inline connector

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

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (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

## Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
------------------	---------------------------------------

## Mounting

Mounting type	DIN rail mounting
---------------	-------------------

# IB IL 24 DI 8/HD-ECO - Digital module

2702792

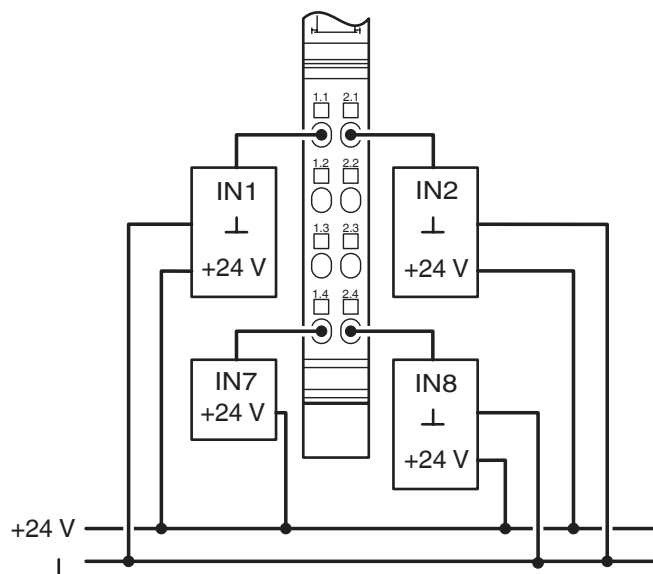
<https://www.phoenixcontact.com/us/products/2702792>

## Drawings

Dimensional drawing



Connection diagram



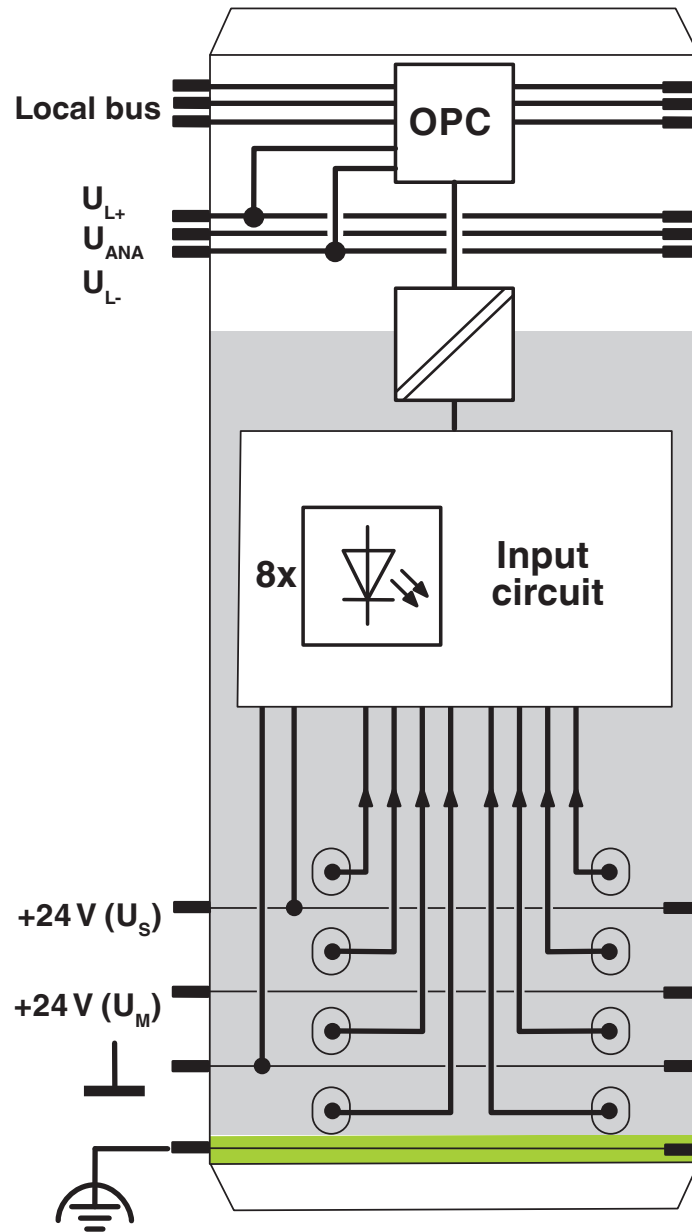
# IB IL 24 DI 8/HD-ECO - Digital module

2702792

<https://www.phoenixcontact.com/us/products/2702792>



Block diagram



Internal wiring of the terminal points

# IB IL 24 DI 8/HD-ECO - Digital module



2702792

<https://www.phoenixcontact.com/us/products/2702792>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2702792>



**cULus Listed**

Approval ID: E140324

2702792

<https://www.phoenixcontact.com/us/products/2702792>

## Classifications

### ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604

### ETIM

ETIM 10.0	EC001599
-----------	----------

### UNSPSC

UNSPSC 21.0	32151600
-------------	----------

## 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-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.)	Lead(CAS: 7439-92-1)
SCIP	885efc74-a0b4-4a8a-a15c-ed2f481a9574

### EF3.1 Climate Change

CO2e kg	2.617 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

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