

# IB IL MBUS-PAC - Communication module



2701927

<https://www.phoenixcontact.com/us/products/2701927>

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Inline, M-Bus master, interface M-Bus, for the connection of M-Bus devices, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

## Product description

The terminal is designed for use within an Inline station. It enables communication with standard M-Bus meters in accordance with EN 13757. The M-Bus master terminal is intended exclusively for use within the Emylytics solution. Emylytics is the Phoenix Contact solution for building management and automation.

## Your advantages

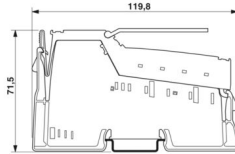
- M-Bus connection for up to 30 devices
- Transmission speed can be set from 300 baud to 19,200 baud
- Parameterization and data exchange via process data

## Commercial data

Item number	2701927
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR18
Product key	DRHABA
Catalog page	Page 416 (NTK-2014)
GTIN	4046356902106
Weight per piece (including packing)	165 g
Weight per piece (excluding packing)	125 g
Customs tariff number	85389099
Country of origin	DE

## Technical data

### Dimensions

Dimensional drawing	
Width	24.4 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

### Interfaces

#### Inline local bus

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

#### M-Bus

Connection method	Inline connector
Transmission speed	300 Baud ... 19200 Baud (configurable)
Transmission physics	Copper

### System properties

#### Module

ID code (dec.)	191
ID code (hex)	BF
Length code (hex)	10
Length code (dec)	16
Process data channel	256 bit
Input address area	32 Byte
Output address area	32 Byte
Register length	256 bit

### Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connectors and marking fields
Operating mode	Process data mode with 16 words

Special properties	for the connection of M-Bus devices
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### Insulation characteristics

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

### Electrical properties

Power dissipation	max. 1.6 W
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#### Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 90 mA
	typ. 65 mA
Power consumption	max. 675 mW
	typ. 488 mW

#### Potentials: Main circuit supply ( $U_M$ )

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. 160 mA
	typ. 56 mA (for 10 unit loads; see example calculation)
	typ. 26 mA (without connected unit loads)

#### Electrical isolation/isolation of the voltage ranges

Test voltage: M-Bus / 7.5 V supply (bus logic)	500 V AC, 50 Hz, 1 min.
Test voltage: M-Bus / 24 V supply $U_M$	500 V AC, 50 Hz, 1 min.
Test voltage: M-Bus/functional ground	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 ( $U_M$ )/functional ground	500 V AC, 50 Hz, 1 min.

### Connection data

#### Connection technology

Connection name	Inline connector
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#### Conductor connection

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

#### 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

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Stripping length	8 mm
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## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °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)

## Standards and regulations

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

Mounting type	DIN rail mounting
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## Classifications

### ECLASS

ECLASS-11.0	27242608
ECLASS-12.0	27242608
ECLASS-13.0	27242608

### ETIM

ETIM 9.0	EC001604
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### UNSPSC

UNSPSC 21.0	32151600
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## Environmental product compliance

REACH SVHC

Lead 7439-92-1

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