

# IB IL AI/TEMP 4 RTD-XC-PAC - Analog module

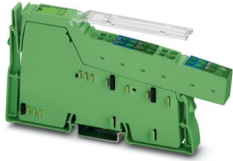


2701165

<https://www.phoenixcontact.com/us/products/2701165>

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Inline, Analog input terminal, transmission speed in the local bus: 500 kbps, Extreme conditions version, degree of protection: IP20, including Inline connector and labeling field



The figure shows the standard item

## Product description

The terminal is designed for use within an Inline station. The terminal has four inputs that can be configured independently of one another for measuring voltages or resistances or for RTDs. The sensors are connected using 2-conductor technology, so that a nominal resistance of at least 1000  $\Omega$  is recommended when sensors with a relatively small temperature coefficient (e.g., platinum sensors) are used. Resistance measurement with conversion into temperature values can be used for temperature measurement with NTC resistors. The advantage of these resistors is their large temperature coefficient. Thanks to special engineering measures and tests, the terminal can be used under extreme ambient conditions.

## Your advantages

- Voltage inputs 0 V ... 10 V
- Inputs for temperature measurements
- Connection of sensors in 2-conductor technology
- Diagnostic and status indicators
- Can be used under extreme ambient conditions
- Extended temperature range of -40 °C ... +70 °C (see "Tested successfully: use under extreme ambient conditions" in the data sheet)
- Coated PCBs

## Commercial data

Item number	2701165
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	DR18
Product key	DRHABA
GTIN	4046356716895
Weight per piece (including packing)	89.6 g
Weight per piece (excluding packing)	68 g
Customs tariff number	85389091
Country of origin	DE

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## Technical data

### Dimensions

Width	12.2 mm
Height	140.5 mm
Depth	71.5 mm

### Material specifications

Color (Housing)	green (RAL 6021)
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### Interfaces

#### Inline local bus

Connection method	Inline data jumper
Transmission speed	500 kbps
Transmission physics	Copper

### Input data

#### Analog:

Data formats	IB IL, IB ST, standardized representation, S7 compatible
Filtering	None or mean value generation over 8 or 32 measured values
Limit frequency (3 dB)	6.6 Hz
Measured value resolution	16 bits (15 bits + sign bit)

#### Analog:

Input filter time	150 ms
	1200 ms
	4800 ms (adjustable)

### Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of supply	including Inline connector and labeling field
Special properties	Extreme conditions version

#### Insulation characteristics

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

### Electrical properties

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

Current draw	max. 65 mA
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## 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 <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)	-25 °C ... 55 °C (Standard)
	-40 °C ... 70 °C (Extended, see section "Tested successfully: use under extreme ambient conditions" in the data sheet.)
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)	-40 °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

### UNSPSC

UNSPSC 21.0	32151600
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## Environmental product compliance

### 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%
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