

# Analog module - IB IL AI 8/IS-PAC

2861661

<https://www.phoenixcontact.com/us/products/2861661>



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Inline, Analog input terminal, Analog inputs: 8, 0 mA ... 20 mA, 4 mA ... 20 mA, -20 mA ... 20 mA, 0 mA ... 40 mA, -40 mA ... 40 mA, connection technology: 2-, 3-conductor, transmission speed in the local bus: 500 kbps, integrated sensor supply, degree of protection: IP20, including Inline connectors and marking fields

## Product Description

The terminal is designed for use within an Inline station.

## Your advantages

- High measuring accuracy
- Excellent interference suppression and common mode rejection
- Integrated short-circuit-proof sensor supply
- Overload-protected current inputs

## Commercial Data

Item number	2861661
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	C21
Product Key	DRI141
Catalog Page	Page 135 (C-6-2019)
GTIN	4017918894504
Weight per Piece (including packing)	250.9 g
Weight per Piece (excluding packing)	125 g
Customs tariff number	85389099
Country of origin	DE

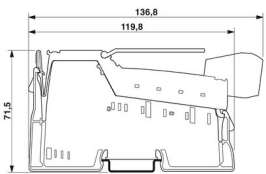
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## Technical Data

### Dimensions

Dimensional drawing	
Width	48.8 mm
Height	136.8 mm
Depth	71.5 mm

### Material specifications

Color	green
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### Interfaces

#### Inline local bus

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

### System properties

#### Module

ID code (dec.)	95
ID code (hex)	5F
Length code (hex)	02
Length code (dec)	02
Process data channel	32 Bit
Input address area	4 Byte
Output address area	4 Byte
Register length	32 Bit
Required parameter data	6 Byte
Required configuration data	5 Byte

### Input data

#### Analog

Input name	Analog inputs
Description of the input	Single-ended inputs, current
Number of inputs	8

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A/D conversion time	approx. 10 $\mu$ s
Connection method	Inline shield connector
Connection technology	2-, 3-conductor
Note regarding the connection technology	shielded
Current input signal	0 mA ... 20 mA 4 mA ... 20 mA -20 mA ... 20 mA 0 mA ... 40 mA -40 mA ... 40 mA
Input resistance current input	25 $\Omega$ 0.01 %
Data formats	IBS IL, IBS ST, IBS RT, standardized representation, PIO format
Limit frequency (3 dB)	3.5 kHz
Measuring principle	Successive approximation
Measured value resolution	16 bits (15 bits + sign bit)
Measured value representation	16 bit two's complement

## Product properties

Type	modular
Product type	I/O component
Scope of delivery	including Inline connectors and marking fields

## Electrical properties

Maximum power dissipation for nominal condition	7.2 W
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### Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 65 mA typ. 52 mA

### Potentials: Supply of analog modules ( $U_{ANA}$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 40 mA typ. 31 mA

### 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. 200 mA 0 A

## Connection data

Connection technology	
Connection name	Inline connector

Conductor connection	
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Connection method	Spring-cage connection
Conductor cross section solid	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>
Stripping length	8 mm

## 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 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)

## 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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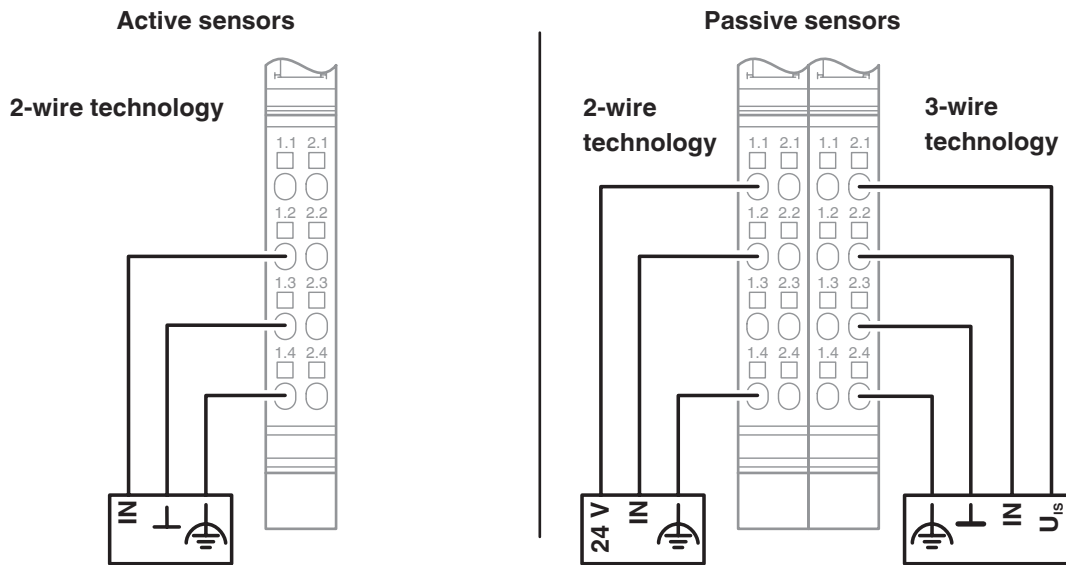


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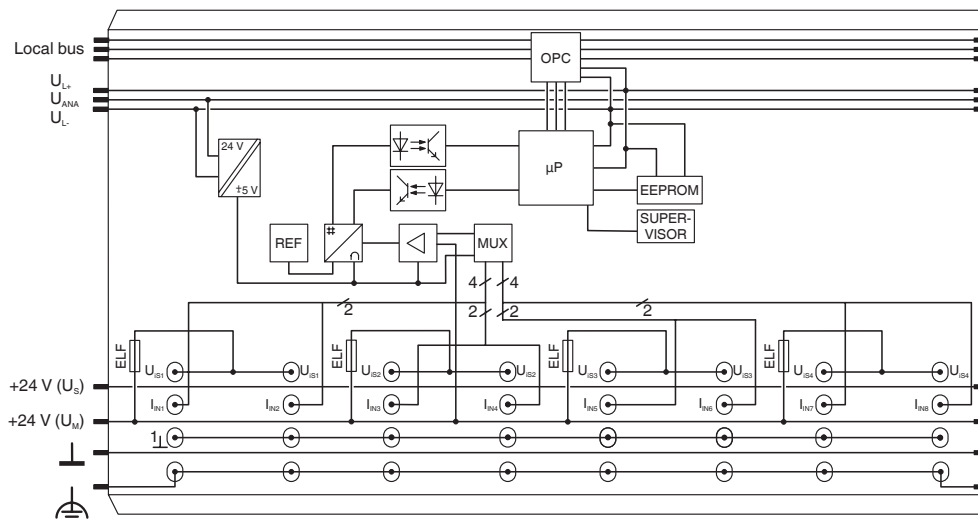
<https://www.phoenixcontact.com/us/products/2861661>

## Drawings

Connection diagram



Block diagram



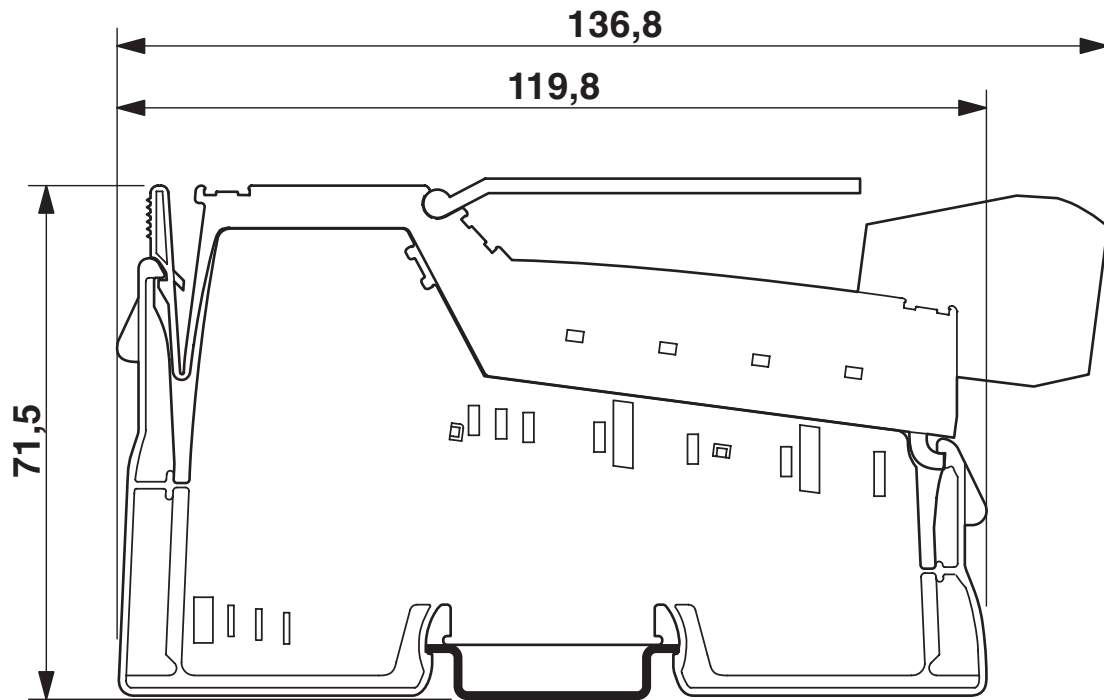
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Dimensional drawing



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## Approvals



**cUL Recognized**  
Approval ID: FILE E 140324



**UL Recognized**  
Approval ID: FILE E 140324



**EAC**  
Approval ID: TR TS\_D\_01921-19



**DNV GL**  
Approval ID: TAA00002CU



**LR**  
Approval ID: LR22191720TA



**BV**  
Approval ID: 20989/B2\_BV

**BSH**

Approval ID: 658a



**RINA**  
Approval ID: ELE121121XG

**ABS**

Approval ID: 22-2226444-PDA

**BSH**

Approval ID: Anwenderhinweis

**cULus Recognized**

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## Classifications

### ECLASS

ECLASS-9.0	27242601
ECLASS-10.0.1	27242601
ECLASS-11.0	27242601
ECLASS-12.0	27242601

### ETIM

ETIM 8.0	EC001596
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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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## Accessories

### Inline shield connector

Inline shield connector - IB IL SCN 6-SHIELD-TWIN - 2740245

<https://www.phoenixcontact.com/us/products/2740245>



Inline shield connector

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### Labeling field

Labeling field - IB IL FIELD 8 - 2727515

<https://www.phoenixcontact.com/us/products/2727515>



Labeling field, width: 48.8 mm

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## Insert strip

Insert strip - ESL 62X46 - 0809502

<https://www.phoenixcontact.com/us/products/0809502>

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems:  
Laser printer, mounting type: insert, lettering field size: 62 x 46 mm, Number of  
individual labels: 15



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## Labeling field

Labeling field - IB IL FIELD 2 - 2727501

<https://www.phoenixcontact.com/us/products/2727501>

Labeling field, width: 12.2 mm



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