

RAD-AI4-U-IFS - I/O extension module



2702290

<https://www.phoenixcontact.com/gb/products/2702290>

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.

Radioline - I/O extension module, 4 analog voltage inputs (0 ... 5 V, 0 ... 10 V)



Your advantages

- Easy module replacement even during operation (hot swap)
- Extended temperature range of -40 °C ... +70 °C
- Channel-to-channel electrical isolation
- Easy startup via thumbwheel

Commercial data

Item number	2702290
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DNC61D
Product key	DNC61D
Catalog page	Page 502 (C-8-2015)
GTIN	4055626076218
Weight per piece (including packing)	196.9 g
Weight per piece (excluding packing)	200 g
Customs tariff number	85177900
Country of origin	US

RAD-AI4-U-IFS - I/O extension module

2702290

<https://www.phoenixcontact.com/gb/products/2702290>



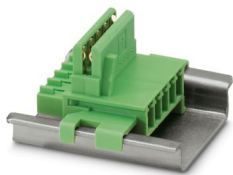
Set consists of

ME 17,5 TBUS 1,5/ 5-ST-3,81 GN - DIN rail bus connectors

2709561

<https://www.phoenixcontact.com/gb/products/2709561>

DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.



Technical data

Notes

Note on application

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

Utilization restriction

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

Product properties

Product type	Extension module
MTTF	887 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	357 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
	65 Years (Telcordia standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))

Insulation characteristics

Overvoltage category	II
Degree of pollution	2

Electrical properties

Electrical isolation	50 V (Rated insulation voltage (in each case between the analog inputs / TBUS supply, reinforced insulation in accordance with EN 61010))
	300 V (Rated insulation voltage (to adjacent devices, basic insulation in accordance with EN/IEC 61010))
Test voltage	1.5 kV AC (50 Hz, 1 min.)
Maximum power dissipation for nominal condition	2.88 W
Transient surge protection	yes

Supply

Supply voltage range	19.2 V DC ... 30.5 V DC (DIN rail connector)
Max. current consumption	≤ 120 mA (At 24 V DC, at 25°C)

Input data

Analog

Description of the input	Voltage input
Number of inputs	4
Voltage input signal	0 V ... 5 V (can be set via DIP switches)
	0 V ... 10 V (can be set via DIP switches)
Resolution	16 bit (Bit)
Precision	≤ 0.1 % (at 25 °C)
Supply voltage	≥ 12 V DC (30 mA maximum current draw)

RAD-AI4-U-IFS - I/O extension module



2702290

<https://www.phoenixcontact.com/gb/products/2702290>

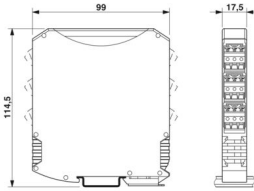
Connection data

Connection method	Screw connection
Stripping length	7 mm
Conductor cross section, rigid min.	0.2 mm ²
Conductor cross section, rigid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14

Signaling

Status display	LED supply voltage, PWR (green)
	Green LED (bus communication, DAT)
	LED periphery error, ERR (red)

Dimensions

Dimensional drawing	
Width	17.5 mm
Height	113 mm
Depth	114.5 mm

Material specifications

Color	green
Flammability rating according to UL 94	V0
Housing material	PA 6.6-FR

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C (>55°C derating) -40 °F ... 158 °F (>131°F derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C -40 °F ... 185 °F
Altitude	2000 m
Permissible humidity (operation)	20 % ... 85 %
Permissible humidity (storage/transport)	20 % ... 85 %

RAD-AI4-U-IFS - I/O extension module



2702290

<https://www.phoenixcontact.com/gb/products/2702290>

Shock	16g, 11 ms
Vibration (operation)	in accordance with IEC 60068-2-6: 5g, 10 Hz ... 150 Hz

Approvals

Conformity/Approvals

Conformance	CE-compliant
ATEX	Ⓜ II 3 G Ex ec IIC T4 Gc IBE _X U 18ATEXB018X
IECEX	IECEX IBE 13.0019X
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D T4 Class I, Zone 2, IIC T4

Standards and regulations

Standard designation	EMC Directive 2014/30/EU
Standards/specifications	EN 61000-6-2
Standard designation	EMC Directive 2014/30/EU
Standards/specifications	EN 61000-6-4
Standard designation	Ex Directive (ATEX)
Standards/specifications	EN 60079-0
Standard designation	Ex Directive (ATEX)
Standards/specifications	EN 60079-15

Mounting

Mounting type	DIN rail: 35 mm
Assembly note	on standard DIN rail NS 35 in accordance with EN 60715
Mounting position	any

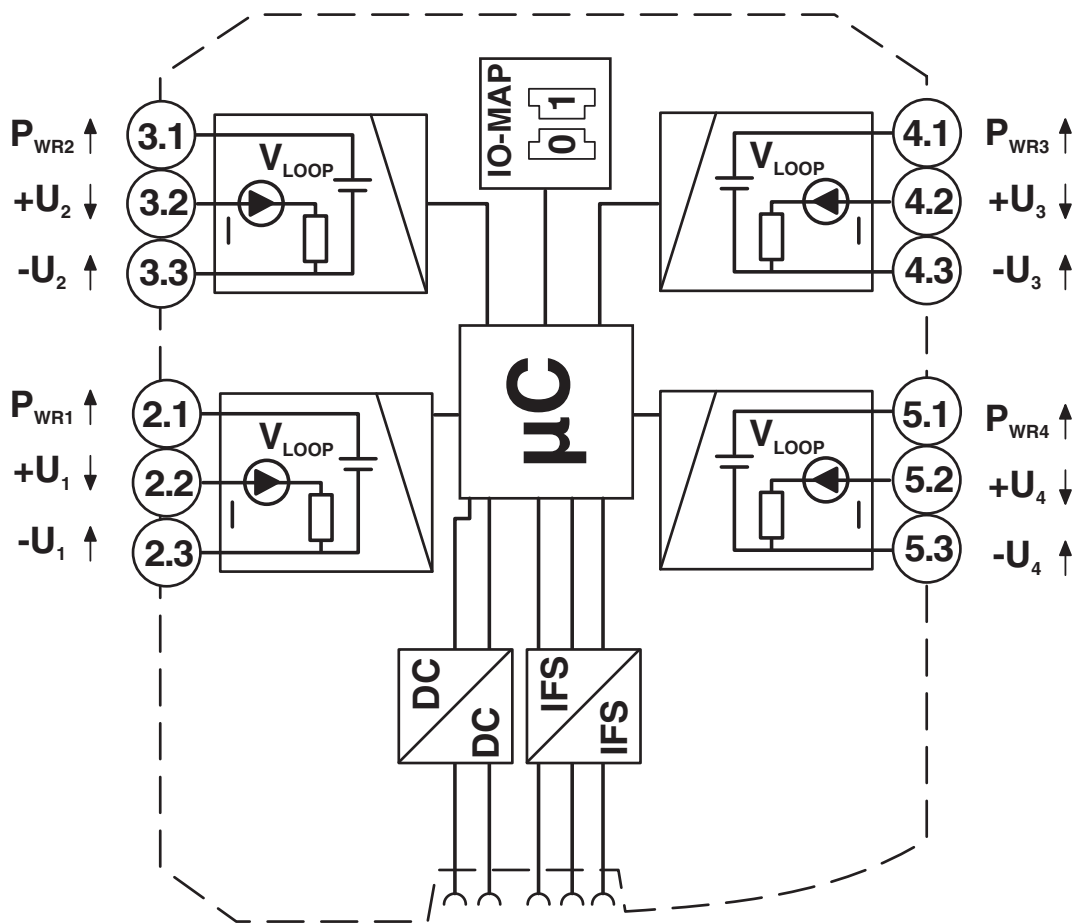
RAD-AI4-U-IFS - I/O extension module

2702290

<https://www.phoenixcontact.com/gb/products/2702290>

Drawings

Circuit diagram



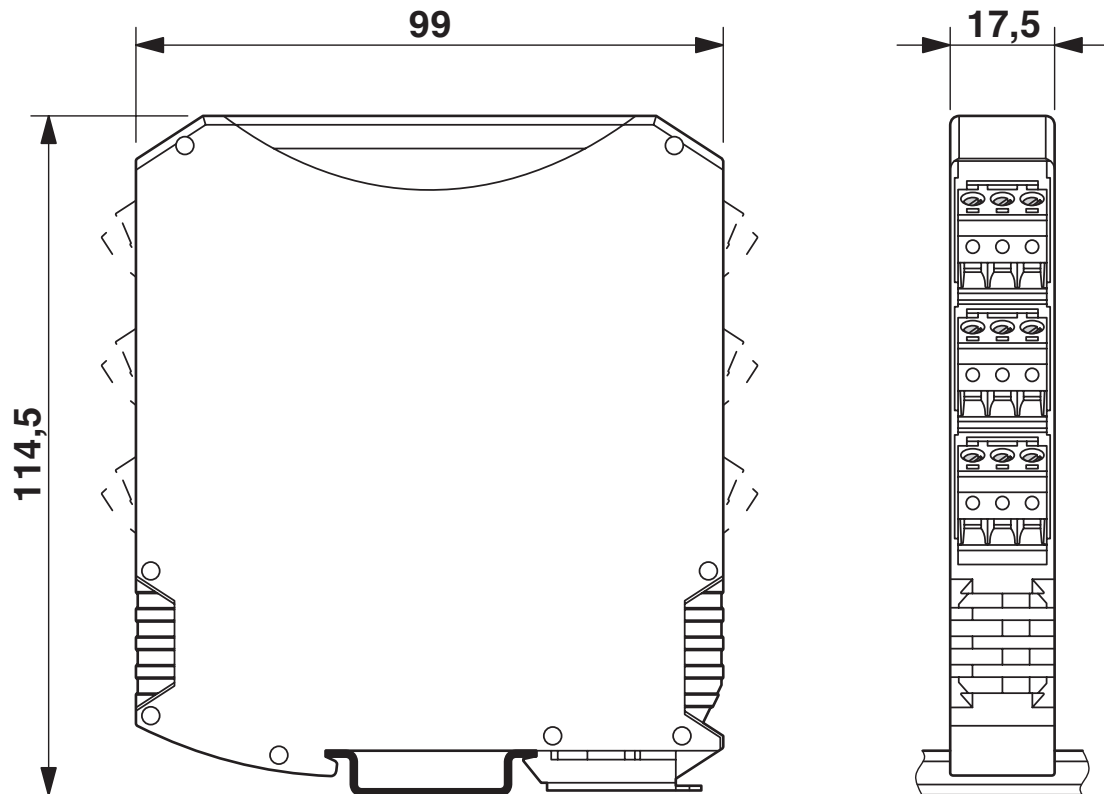
RAD-AI4-U-IFS - I/O extension module

2702290

<https://www.phoenixcontact.com/gb/products/2702290>



Dimensional drawing



Slim design

RAD-AI4-U-IFS - I/O extension module




2702290

<https://www.phoenixcontact.com/gb/products/2702290>


Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2702290>

 **UL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E196811

 **UL Listed**
Approval ID: E196811

cULus Listed

cULus Listed

RAD-AI4-U-IFS - I/O extension module



2702290

<https://www.phoenixcontact.com/gb/products/2702290>

Classifications

ECLASS

ECLASS-11.0	27242601
ECLASS-12.0	27242601
ECLASS-13.0	27242601

ETIM

ETIM 9.0	EC001596
----------	----------

UNSPSC

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

RAD-AI4-U-IFS - I/O extension module



2702290

<https://www.phoenixcontact.com/gb/products/2702290>

Environmental product compliance

EU RoHS

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

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	79373e14-1184-4179-bb37-75904848c584

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk