

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



2702290

<https://www.phoenixcontact.com/us/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 | DN26 |
| Product key | DNC61D |
| GTIN | 4055626076218 |
| Weight per piece (including packing) | 200 g |
| Weight per piece (excluding packing) | 196.9 g |
| Customs tariff number | 85177900 |
| Country of origin | US |

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

2702290

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



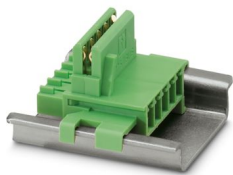
Set consists of

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

2709561

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

DIN rail bus 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 |
|---------------------|-------------------------|

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 bus 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) |

Connection data

| | |
|-------------------|------------------|
| Connection method | Screw connection |
|-------------------|------------------|

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

2702290

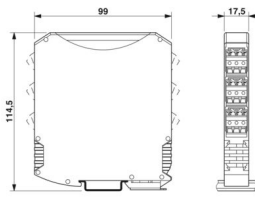
<https://www.phoenixcontact.com/us/products/2702290>

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

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



2702290

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

Approvals

Conformity/Approvals

| | |
|------------------|--|
| Conformance | CE-compliant |
| ATEX | Ⓜ II 3 G Ex ec IIC T4 Gc IBExU 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

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

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

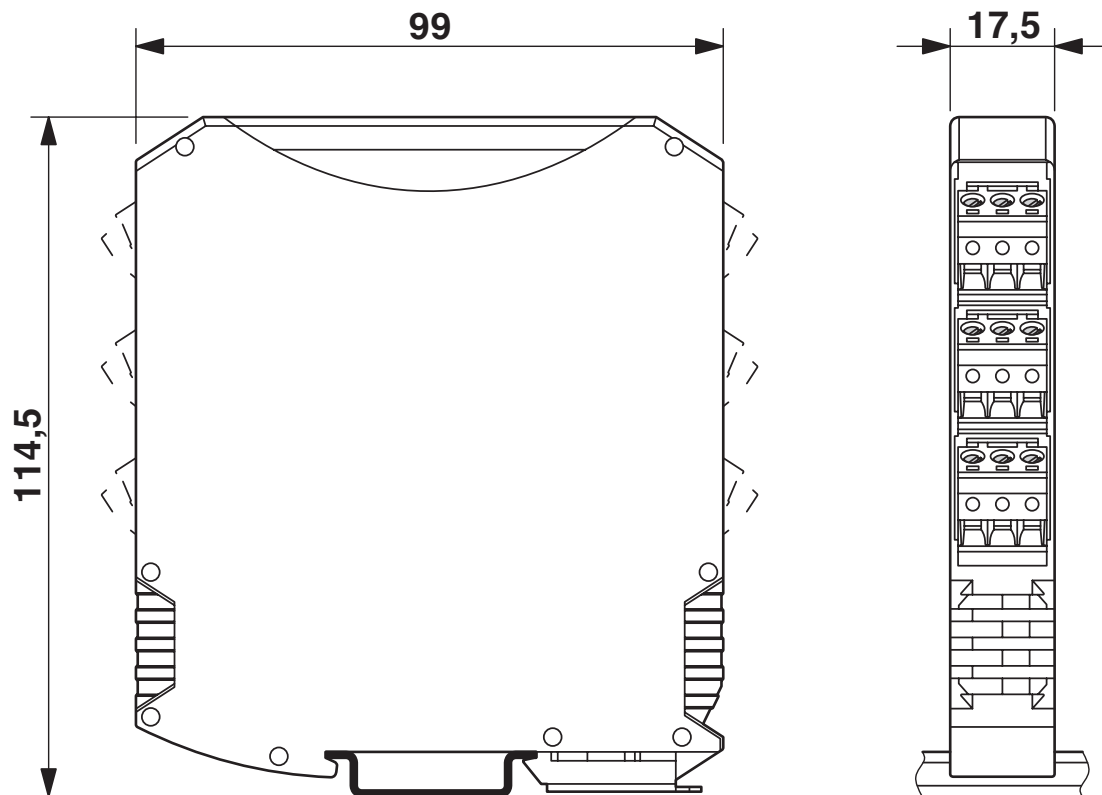
2702290

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



Drawings

Dimensional drawing



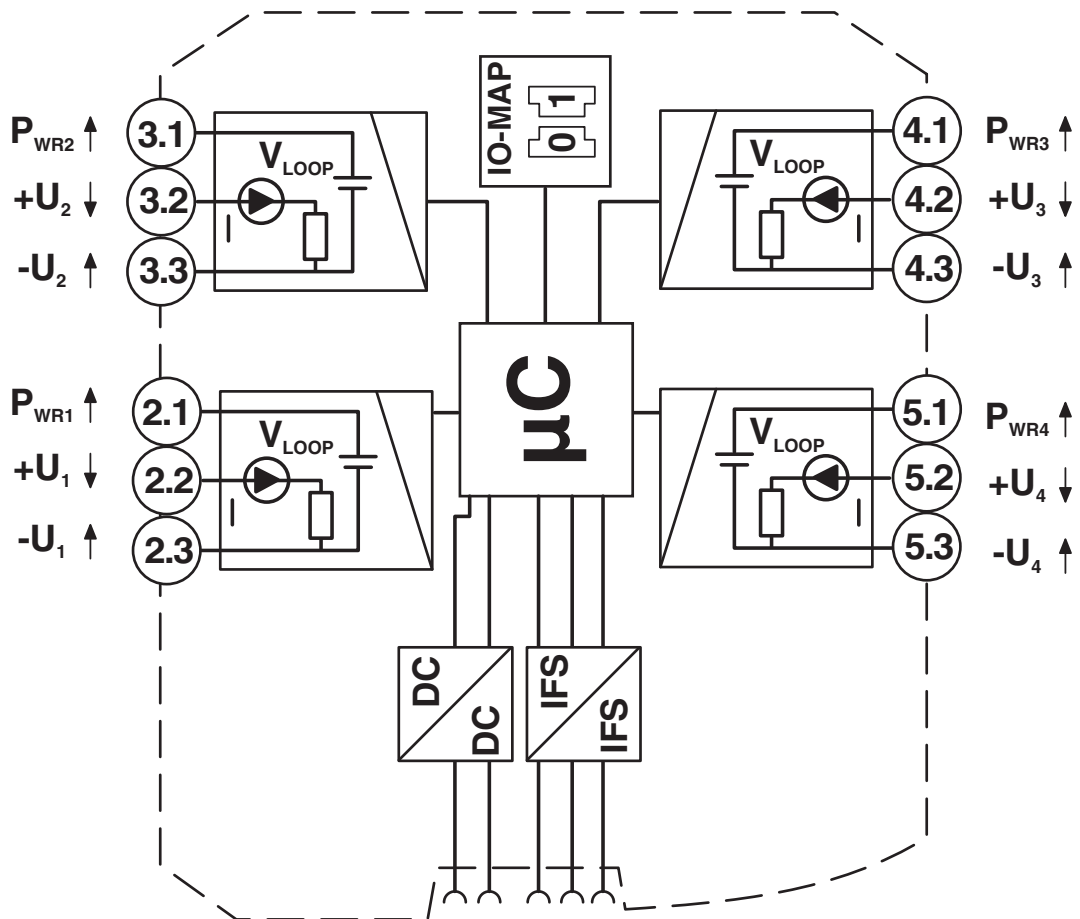
Slim design

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

2702290

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

Circuit diagram



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



2702290

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

Approvals

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



UL Listed

Approval ID: E238705



cUL Listed

Approval ID: E238705



cUL Listed

Approval ID: E196811



UL Listed

Approval ID: E196811

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



2702290

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

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27242601 |
| ECLASS-15.0 | 27242601 |

ETIM

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

UNSPSC

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

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



2702290

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

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) |
| | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7) |
| SCIP | 79373e14-1184-4179-bb37-75904848c584 |

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