

# RN42 active barrier, wide range power supply

1-channel wide range supply and active barrier for safe isolation of 4 to 20 mA standard signal circuits



More information and current pricing:

[www.us.endress.com/RN42](http://www.us.endress.com/RN42)

## Benefits:

- Wide range power supply of 19.2 to 253 V<sub>AC/DC</sub>
- Quick and easy wiring thanks to plug-in terminals
- Optional for safety-oriented applications up to SIL 2 (SC3) in accordance with IEC 61508
- Optional installation in Ex Zone 2
- Compact housing width with 17.5 mm (0.69 in) for efficient use of space
- Option for installation rotated by 180° (terminals for power supply at top or bottom)

## Specs at a glance

- **Input** 0/4...20 mA / HART feeding/not feeding
- **Output** 0/4...20 mA / HART active/passive
- **Power Supply** 20...250 V AC/DC

**Field of application:** The active barrier is used for transmission and galvanic isolation of 4 to 20 mA/HART signals. The device has an active / passive current input to which a 2- or 4-wire transmitter can be connected directly. The output of the device can be operated actively or passively. The current signal is then available to the PLC / controller or for further instrumentation at pluggable screw or optional push-in terminals.

## Features and specifications

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**Power supplies & barrier****Measuring principle**Active barrier

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**Measuring principle**Active barrier

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**Function**1-channel

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**Loop power supply**17,5 V  $\pm$  1 V bei 20 mAopen circuit voltage: 24,5 V  $\pm$  5 %

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**Power Supply**20...250 V AC/DC

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**Input**

0/4...20 mA / HART

feeding/not feeding

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**Output**

0/4...20 mA / HART

active/passive

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**Certificates**

ATEX II3G Ex tc IIIC Dc

CSA C/US AIS, I/2/ABCD

EAC [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc

JPN [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc

INMETRO [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc

NEPSI [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc

UK II3G Ex tc IIIC Dc

UK II(1)G [Ex ia Ga] IIC, II(1)D [Ex ia Da] IIIC, II3G Ex ec IIC Gc

ATEX IECEX II(1)G [Ex ia Ga] IIC, II(1) D [Ex ia Da] IIIC, II3G Ex ec IIC  
Gc

UL C/US

DNV

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Power supplies & barrier

**SIL**  
SIL 2 SC 3

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**Operation**  
HART

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