

RN22 active barrier, power supply, analog signal doubler

Intrinsically safe 24 V_{DC} compact interface module for use in hazardous areas, SIL systems



Benefits:

- Intrinsically safe interface device suited for use in safety instrumented systems up to SIL 2 (SC 3) in accordance with IEC 61508
- Quick and easy wiring with screw or push-in terminals or power supply via power rail T-connector
- Easy access to frontside HART® connection taps
- Compact housing: up to two channels on 12.5 mm (0.49 in) for efficient use of space in control cabinets

Specs at a glance

- **Input** 0/4...20 mA / HART feeding/not feeding
- **Output** 0/4...20 mA / HART active/passive
- **Power Supply** 24 V DC

from **€141.46**

Price as of 28.11.2022

More information and current pricing:

www.fr.endress.com/RN22

Field of application: The 1- or 2-channel RN22 active barrier powers analog instrument loops and **safety instrumented systems** up to SIL 2 (SC 3). The intrinsically safe, **HART®** transparent interface establishes a reliable link between field devices and process control. It interfaces with 2-/4-wire devices in hazardous areas and provides a second galvanically isolated signal output acc. to **NAMUR NE 175**. This opens a second channel for the process optimization domain without affecting the traditional automation system.

Features and specifications

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

Measuring principleActive barrier

Function

1-channel

2-channel

Signal doubler

Loop power supply

17,5 V \pm 1 V bei 20 mA open circuit
voltage: 24,5 V \pm 5 %

Power Supply24 V DC

Input

0/4...20 mA / HART
feeding/not feeding

Output

0/4...20 mA / HART
active/passive

Power supplies & barrier

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

SIL

SIL 2 SC 3

Operation

HART

More information www.fr.endress.com/RN22