RIA45
Process meter with control unit

Multifunctional panel mounted process meter for monitoring and indication of analog measured values

Benefits:
- 5-digit 7-segment LC display, backlit
- 1 or 2 universal inputs
- 2 relays (optional)
- Min./max. value saved
- 1 or 2 calculated values and linearization table
- Digital status output (Open Collector)
- SIL2 approval (optional); marine approval

Specs at a glance
- **Input** 2 x universal (U, I, R, RTD, TC)
- **Output** 1 x loop power supply
- **Output** 2 x analogue output (I, U) 1 x loop power supply
- **Display** Multicolor backlight LCD White/black/yellow Bargraph Unit TAG Alarm warning in plain text
- **Power Supply** 20...250V AC/DC

**Field of application:** Analog measured values are indicated, evaluated and calculated by the process meter. With the integrated loop power supply two-wire sensors can be powered. The universal inputs enable the connection of current, voltage, RTDs and TCs. Limit values can be monitored and relays can be switched. Via analog outputs process signals can be forwarded. The integrated application package "differential pressure" allows the quick and easy commissioning for differential pressure applications.

Features and specifications
Process indicator & control units

**Measuring principle**
Indicators with control unit

**Measuring principle**
Process meter with control unit

**Function**
Display
Loop power supply
Transmitter functionality
Barrier
Signal isolation
Calculation
Limit alarm

**Display**
Multicolor backlight LCD
White/black/yellow
Bargraph
Unit
TAG
Alarm warning in plain text

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

**Input**
2 x universal (U, I, R, RTD, TC)

**Output**
1 x loop power supply

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1 x loop power supply
Panel Meter with Control Unit RIA45

Process indicator & control units

**Software functions**
- Linearization
- Minimum value per channel
- Maximum value per channel
- Calculation
- Band value monitoring

**Certificates**
- ATEX II(1)GD [Ex ia] IIC
- CSA General Purpose
- CSA AIS, NI/I/2/ABCDEF/G/T4
- FM AIS, NI/I/2/ABCDEF/G/T4
- TIIS [Ex ia] IIC
- NEPSI [Ex ia] IIC
- UK II(1)G [Ex ia Ga] IIC, II(1)D [Ex ia Da]
- IIIC
- marine certificate

**SIL**
- 2

**Panel mounting**
- panel mounting

Acquisition / Evaluation

**Measuring principle**
- Display

**Function**
- Display
- Loop power supply
- Transmitter functionality
- Barrier
- Signal isolation
- Calculation
- Limit alarm
### Acquisition / Evaluation

#### Certification
- ATEX II (1)GD[Ex ia] 4C
- CSA AIS, NI/I/2 ABCDEFG/T4
- FM AIS, NI/I/2 ABCDEFG/T4
- Marine approval
- UR C/US

#### Input
- 2 x universal (U, I, R, RTD, TC)

#### Output
- 2 x analogue output (I, U)
- 1 x loop power supply

#### Relay output
- 2 x changeover contact
- 1 x open collector

#### Auxiliary power supply / Loop power supply
- 20...250V AC/DC

#### Dimensions (wxhxd)
- Panel housing:
  - 96 x 48 x 175 mm
  - (3.78" x 1.89" x 6.89")

#### Software
- Linearization
- Minimum value per channel
- Maximum value per channel
- Calculation
- Band value monitoring

#### Operation
- 3 keys
- Interface CDI to USB at PC + configuration software
- FieldCare
**Acquisition / Evaluation**

**Display**
- Multicolor backlight LCD
- White/black/yellow
- Bargraph
- Unit
- TAG
- Alarm warning in plain text

More information [www.endress.com/RIA45](http://www.endress.com/RIA45)