

# RIA452

## Process indicator with pump control

Digital process meter in panel mounted housing for monitoring and displaying analog measured values



### Benefits:

- 7-digit 14-segment LC display, large bar graph with overrange and underrange
- Digital status inputs for pump monitoring
- Flow measurement for open channels and weirs
- Intrinsically safe input with integrated loop power supply
- Min/Max value saved
- Linearization table with up to 32 support points

### Specs at a glance

- **Input** 1 x analog (U, I, RTD, TC, R)
- **Output** 1 x analog (U, I) 1 x transmitter power supply
- **Output** 1 x analog (U, I) 1 x transmitter power supply
- **Display** LCD multicolour Illuminated Bargraph
- **Power Supply** 90...250 V AC 20...28 V AC 20...36 V DC

from **CA\$1,100.00**

Price as of 01.10.2022

More information and current pricing:

[www.ca.endress.com/RIA452](http://www.ca.endress.com/RIA452)

**Field of application:** The process meter monitors and displays the analog measured values. Pumps can be monitored with the digital status inputs. The RIA452 can provide power directly to two-wire sensors connected. Up to eight freely programmable relays monitor the measured value. Other operating modes for the relays include sensor or device malfunction, batch and pump control functions. Furthermore, the RIA452 can be used as a preset counter and for measuring flow at open channels and measuring weirs.

### Features and specifications

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**Process indicator & control units****Measuring principle**

Indicators with control unit

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**Measuring principle**

Process indicator with pump control

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**Function**Display  
Power  
Switch  
Seperate  
Convert  
Count  
Calculate

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**Display**LCD multicolour  
Illuminated  
Bargraph

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**Power Supply**90...250 V AC  
20...28 V AC  
20...36 V DC

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**Input**

1 x analog (U, I, RTD, TC, R)

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**Output**1 x analog (U, I)  
1 x transmitter power supply

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**Output**1 x analog (U, I)  
1 x transmitter power supply

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**Process indicator & control units****Software functions**

Pump control  
Linearisation  
Flow calculation  
Batch counter

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**Certificates**

Non-hazardous area  
FM  
CSA  
W/o ATEX approval, Ex-sensor supply via external  
RB223

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**SIL**

Not defined

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**Panel mounting**

panel mounting

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**Acquisition / Evaluation****Measuring principle**

Display

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**Function**

Display  
Power  
Switch  
Seperate  
Convert  
Count  
Calculate

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**Acquisition / Evaluation****Certification**

UL rec. Comp  
ATEX Ex i  
FM USA IS  
FM USA NI  
CSA IS  
CSA NI  
TIIS Ex ia

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**Input**

1 x analog (U, I, RTD, TC, R)

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**Output**

1 x analog (U, I)  
1 x transmitter power supply

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**Relay output**

4...8 x changeover contacts

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**Auxiliary power supply / Loop power supply**

90...250 V AC  
20...28 V AC  
20...36 V DC

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**Dimensions (wxhxd)**

Panel housing:  
96 x 96 x 161.3 mm  
(3.78" x 3.78" x 6.35")

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**Software**

Pump control  
Linearisation  
Flow calculation  
Batch counter

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Acquisition / Evaluation

**Operation**

3 keys

Interface RS252 + ReadWin2000

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**Display**

LCD multicolour

Illuminated

Bargraph

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More information [www.ca.endress.com/RIA452](http://www.ca.endress.com/RIA452)