Universal process transmitter with control unit

# RMA42

**€ 206.–**
11–35 pcs.

Complete product information:
www.e-direct.endress.com/rma42

- 1 or 2 universal inputs, optional intrinsically safe
- Backlit 5-digit LCD
- 2 limit value relays with additional status output

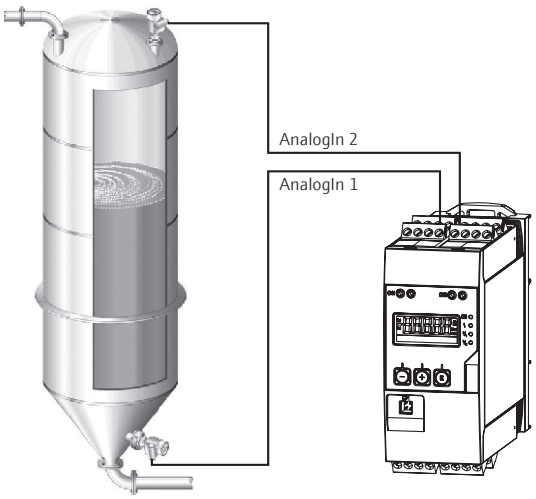
### Specs at a glance:

- **Inputs:**
  1/2 universal inputs measuring current, voltage, resistance, temperature, optional intrinsically safe
- **Functionalities:**
  Linearization, mathematical calculations, differential pressure package
- **Outputs:**
  2 relays, 1/2 analog outputs
- **Dimensions:**
  45 × 115 × 118 mm (1.77" × 4.53" × 4.66")
- **Display:**
  LCD – 2 lines; black/white/yellow; toggle function between channels

**Application** Due to its universal design RMA42 is suitable for many industries such as chemical, water and waste water and food and beverages. Typical applications include monitoring of signals for any violation of preset limit values (also to WHG) as well as transmission of signals from hazardous areas, differential pressure applications and signal multiplying. RMA42 can be installed in a switch cabinet or used in a field housing.

**Function** The RMA42 process transmitter powers the transmitter or sensor and processes the analog signals from those. These signals are monitored, evaluated, calculated, saved, separated, linked, converted and displayed. The signals, intermediate values and the results of calculations and analysis are transmitted by digital or analog means. With the two relays the process can be controlled.

## Application example




Example of application "differential pressure"

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People for Process Automation

## Technical data

| Input parameters | |
|---|---|
| Input | 1/2 × universal input 0 to 20 mA, 4 to 20 mA; Over range: up to 22 mA, 0 to 10 V, 2 to 10 V, 0 to 5 V, 1 to 5 V, ±1 V, ±10 V, ±30 V, ±100 mV, 30 to 3000 Ω; Pt 100 according to IEC60751, GOST, JIS1604, Pt 500 and Pt 1000 according to IEC60751; Cu 100, Cu 50, Pt 50, Pt 46, Cu 53 according to GOST; Ni 100, Ni 1000 according to DIN43760; Type J, K, T, N, B, S, R according to IEC60584; Type U according to DIN43710; Type L according to DIN43710, GOST; Type C, D according to ASTM E998 |
| Linearization | 2 Linearization tables of input values (up to 32 linearization points supported) |

| Output parameters | |
|---|---|
| Analog output | 1/2 × analog output, 0 to 20 mA, 4 to 20 mA; 0 to 10 V, 2 to 10 V, 0 to 5 V; short-circuit proof, $I_{max}$ <25 mA |
| Loop power supply | 24 V DC (+15 %/–5 %), max. 30 mA; short-circuit proof and overload proof; galvanically isolated from system and outputs |
| Status Output | Open Collector to monitor device status as well as cable open circuit |
| Relay | 2 changers with function modes: min, max, gradient, alarm, out-band, in-band |
| Limit function | Max. contact burden DC 30 V / 3 A (permanent state, without destruction of the input) Max. contact burden AC 250 V / 3 A (permanent state, without destruction of the input) Min. contact load 500 mW (12 V/10 mA) |

| Operating conditions | |
|---|---|
| Protection Class | DIN rail housing IP20 |
| Ambient temperature | –20 to +50 °C (–4 to 122 °F) |
| Storage temperature | –40 to +85 °C (–40 to 185 °F) |

| Power supply | |
|---|---|
| Wide range power supply | 24 V to 230 V AC/DC (–20%/+10%) 50/60 Hz |

| Structural design | |
|---|---|
| Housing (W × H × D) | 45 × 115 × 118 mm (1.77" × 4.53" × 4.66") |
| Electrical Connection | Pluggable screw clamps, 2,5 mm² |

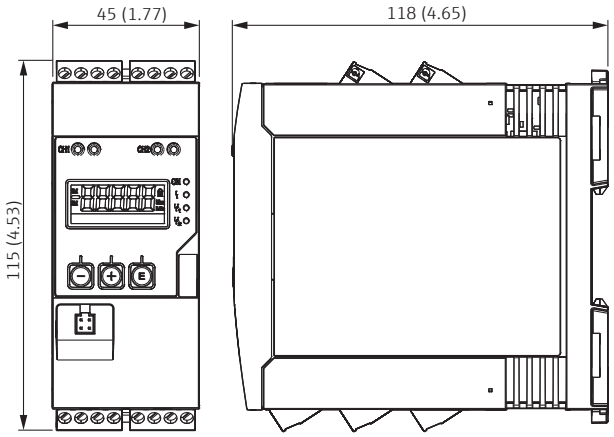
| Display and user interface | |
|---|---|
| Display | LCD 2-lines; black/white/yellow; toggle function; 1st line: 7 segment, 5-digit; 2nd line: Dot-Matrix free programmable for Bargraph, TAG, unit |
| LED | 2× Device status; 2× Relay status |
| Operation | using three buttons and/or via configuration software FieldCare Device Setup |

| Approvals | |
|---|---|
| Ex-Approvals | ATEX II(1)GD [Ex ia] IIC |
| Others | SIL2, UL, GL, CSA GP |

| Software functionalities |
|---|
| Min/Max log function / memory, alarm logging, differential pressure application package, 2 calculation channels: sum, difference, average, linearization |

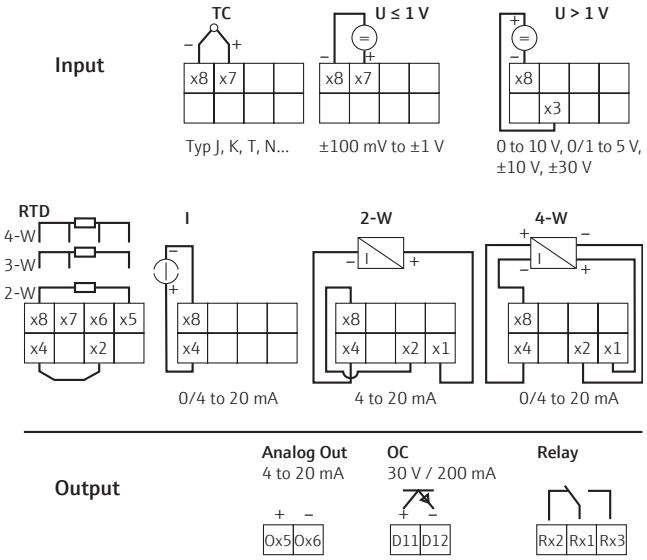
| Accessories |
|---|
| Configuration software FieldCare Device Setup |
| Commubox TXU10 (including FieldCare Device Setup) |

## Dimensions in mm (inches)




Installation according to instruction manual.

## Electrical connection




## Price table

| Process transmitter RMA42 | | Order no. | Price/pcs. in € | | |
|---|---|---|---|---|---|
| Approval | Input; Output | | 1 to 3 | 4 to 10 | 11 to 35 |
| Non-hazardous area | 1 × universal; 1 × analog | RMA42-AAA | 251.– | 226.– | 206.– |
| | 2 × universal; 2 × analog | RMA42-AAB | 341.– | 307.– | 279.– |
| | 1 × universal; 1 × analog + 2 relay | RMA42-AAC | 304.– | 274.– | 250.– |
| | 2 × universal; 2 × analog + 2 relay | RMA42-AAD | 394.– | 354.– | 323.– |
| ATEX II(1)GD [Ex ia] IIC | 1 × universal; 1 × analog | RMA42-BHA | 296.– | 266.– | 243.– |
| | 2 × universal; 2 × analog | RMA42-BHB | 386.– | 348.– | 317.– |
| | 1 × universal; 1 × analog + 2 relay | RMA42-BHC | 350.– | 315.– | 287.– |
| | 2 × universal; 2 × analog + 2 relay | RMA42-BHD | 439.– | 395.– | 360.– |

| Accessories | Order no. | Price/pcs. in € |
|---|---|---|
| Configuration kit USB | TXU10-AC | 101.72 |
| Protective housing IP 66 for max. 2 RMA42 (182 × 180 × 165 mm) | 52010132 | 74.96 |

Prices are applicable for Austria until 30/06/2020, in Euro per unit, net excluding value added tax (VAT), cost of packing and dispatch.
Endress+Hauser retains the right to change or modify pricing at any time. The terms of sales and delivery of Endress+Hauser are applicable.
Current prices and delivery times can be verified prior to ordering on www.e-direct.endress.com.

Complete product information:
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