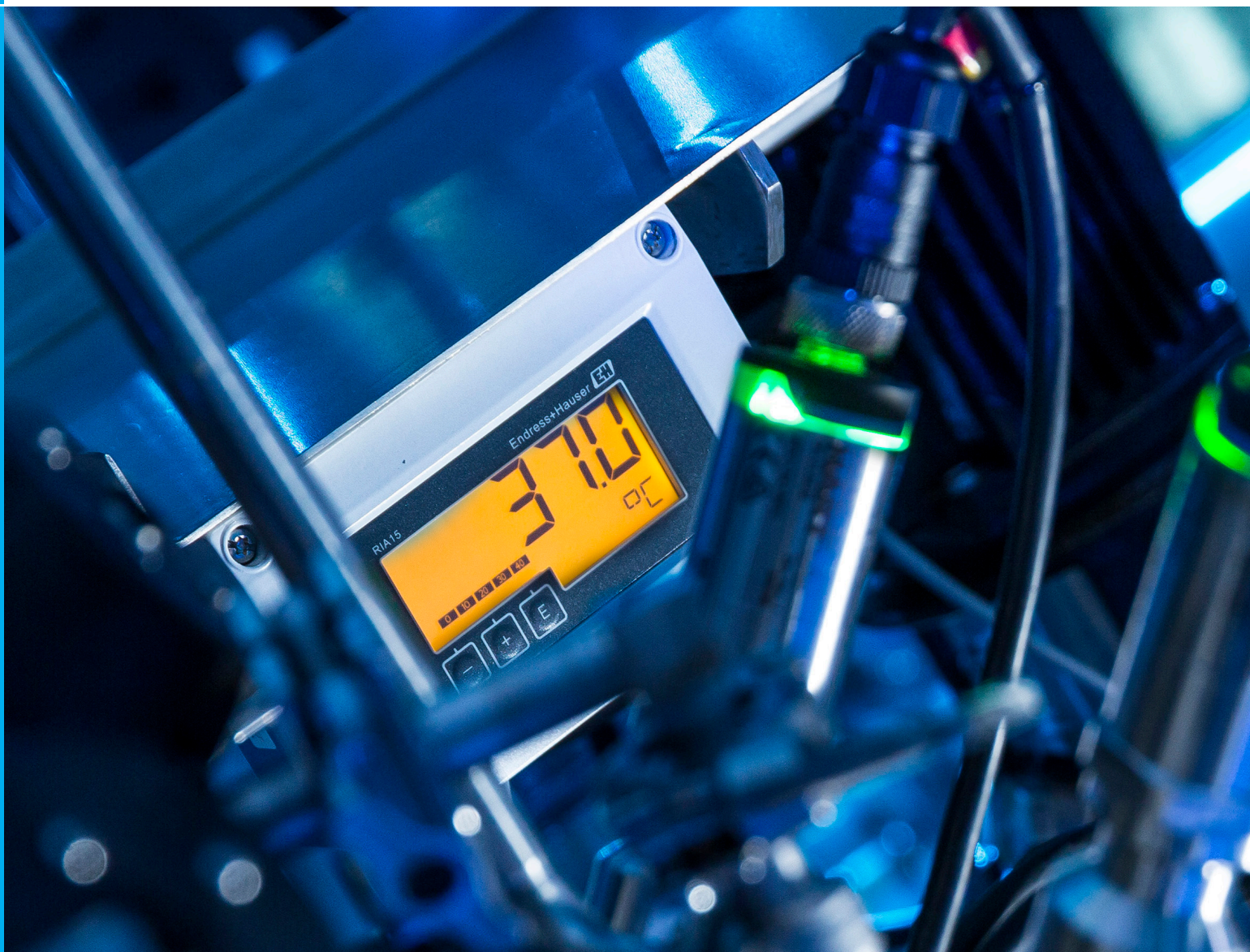


## System products and data managers

Solutions to complete your measuring point



## Power supplies & barriers, overvoltage protection

RN22



- Active barrier | 24 V DC**
- 1/2 channel, signal doubler
  - 4 ... 20 mA/HART®, T-connector
  - In/Out active or passive, HART® signal tapping
  - cULus, SIL 2 (SC 3), Marine (DNV)
  - ATEX/IECEX, UK, INMETRO, NEPSI, cCSAus, JPN Ex, KC Ex

RLN22



- NAMUR isolating amplifier | 24 V DC**
- 1/2 channel, relay output, T-connector
  - Line fault detection, wire break or short-circuit
  - SIL 2, Marine (DNV)
  - ATEX/IECEX, UKCA

RNO22



- Output isolating amplifier | 24 V DC**
- 4 ... 20 mA/HART®
  - Line fault detection
  - SIL 2 (SC 3), Marine (DNV)
  - ATEX/IECEX, UKCA

RNB22



- System power supply | 100-250 V AC/24 V DC 2.5 A**
- Static/dynamic boost 3.125 A / 5 A
  - Parallel operation for redundancy
  - Preventive function monitoring
  - Power supply for RN Series or 4 W sensors
  - UKCA

RNF22



- Power supply / error signal doubler module**
- Single or redundant power supply in T-connector up to 3.75 A, with fuse
  - Error message in case of power failure
  - Group error message for NAMUR devices
  - ATEX/IECEX, UKCA, Marine (DNV)

RN42



- Active barrier | 24 to 230V AC/DC**
- 1 channel, 4 ... 20 mA/HART®
  - In/Out active or passive, HART® sockets
  - Optional 180° rotated installation
  - cULus, SIL 2 (SC 3), Marine (DNV)
  - ATEX/IECEX, UKCA, INMETRO, NEPSI, CSA, JPN Ex, KC Ex

RLN42



- NAMUR isolating amplifier | 24 to 230 V AC/DC**
- 2 channel, relay output
  - Line fault detection, wire break or short-circuit
  - SIL 2, Marine (DNV)
  - ATEX/IECEX, UKCA

RB223



- Passive barrier**
- 1/2 channel, loop-powered
  - 4 ... 20 mA; input or output
  - HART® sockets
  - SIL 3
  - ATEX, FM, CSA

HAW562



- Surge arresters**
- DIN rail
  - 4 ... 20 mA, HART®, PFM, PROFIBUS PA/DP, FOUNDATION Fieldbus or RS-485, Modbus, 10-55 V; 90-230 V
  - SIL 2; ATEX/IECEX, CSA

HAW569



- Surge arresters**
- For installation in field device
  - 4 ... 20 mA, HART®, PFM, PROFIBUS PA, FOUNDATION Fieldbus, 0-66 V or 80-230 V
  - Ex ia/d; ATEX/IECEX, CSA

## Process indicator & control units

RIA15



- Loop-powered**
- 4 ... 20 mA or HART®
  - Versions for level, analysis
  - Field housing or panel
  - Ex ia
  - Aluminum or polymer (PC)
  - SIL 2, Marine (DNV)
  - ATEX, FM, CSA, IECEX, cULus, UKCA, JPN Ex, NEPSI, EAC Ex

RIA14



- Loop-powered**
- 4 ... 20 mA, HART® transparent
  - Field housing, aluminum or 316L
  - Ex d (flameproof)
  - cURus, Marine (DNV)
  - ATEX, FM, CSA, IECEX, EAC Ex, NEPSI, UKCA, TIIS

RIA16



- Loop-powered**
- 4 ... 20 mA, HART® transparent
  - Field housing, aluminum or polymer (PC)
  - Ex ia
  - cURus, Marine (DNV)
  - ATEX, FM, CSA, IECEX, EAC Ex, NEPSI, UKCA

RID14



- Fieldbus indicator**
- FOUNDATION Fieldbus or PROFIBUS PA, 8 channels
  - Field housing, aluminum or stainless steel (316L)
  - Ex d (flameproof)
  - ATEX, CSA, FM, IECEX

RID16



- Fieldbus indicator**
- FOUNDATION Fieldbus or PROFIBUS PA, 8 channels
  - Field housing, aluminum or polymer (PC)
  - Ex ia
  - ATEX, CSA, FM, IECEX

RMA42



- Process indicator with control unit**
- 1/2 analog, temperature inputs
  - 1/2 analog, 0/2 relay outputs
  - Multiplication, average, differential functions
  - Linearization, limit value, overflow prevention
  - cURus, SIL 2, Marine (DNV)
  - ATEX, FM, CSA, NEPSI, UKCA

RIA45



- Process indicator with control unit**
- 1/2 analog, temperature inputs
  - 1/2 analog, 0/2 relay outputs
  - Multiplication, average, differential functions
  - Linearization, limit value, overflow prev.
  - cURus, SIL 2, Marine (DNV)
  - ATEX, FM, CSA, UKCA

RIA46



- Process indicator with control unit**
- 1/2 analog, temperature inputs
  - 1/2 analog, 0/2 relay outputs
  - Multiplication, average, differential functions
  - Linearization, limit value, overflow prev.
  - cURus, SIL 2
  - ATEX, FM, CSA, UKCA

FMA90



- Control unit for W/WW applications**
- Level linearization, open channel flow, pump & rake control
  - Field, panel and DIN rail housing
  - 3.5" graphic touch display
  - 2 x 4 to 20 mA / HART inputs
  - Trend view & event log with real time stamp
  - Ethernet, WLAN, webserver



## Application & energy managers

### RH33



#### BTU meter for custody transfer

- Water, glycol, other fluids
- Bidirectional measurement
- IAPWS-97 calculation standard
- Web server, USB, TC/IP, Modbus, M-Bus
- MID, OIML R75, CSA GP, PTB, UKCA

### RS33



#### Steam calculator; mass and energy

- Saturated and superheated steam
- Bidirectional measurement
- IAPWS-97 calculation standard
- Web server, USB, TCP/IP, Modbus, M-Bus
- CSA GP, UKCA

### RA33



#### Batch controller

- Batching and dosing
- Automatic after-run correction
- ASTM D1250-04
- USB, TCP/IP, Modbus TCP, RTU, RS-232
- CSA GP, NTEP

## Data managers & data loggers

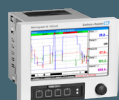
### RSG35



#### Graphic data manager

- Up to 12 universal inputs
- 30 limit values/6 relays
- 4 math channels
- USB, Ethernet, RS-232/RS-485
- Modbus RTU/TCP slave
- UKCA

### RSG45



#### Advanced data manager

- Front panel; stainless steel, DIN rail
- Math channels, telealarm
- Batch controller, energy computer
- W-WW application packages
- iTHERM TrustSens calibration monitoring



- Up to 20 universal channels (analog/HART®)
- Up to 40 channels with fieldbus
- 6/14 DI; 60 limit values, 12 relay outputs
- RS-232/RS-485; PROFINET, EtherNet IP
- Modbus RTU/TCP Master/Slave, USB
- ATEX, UKCA

### FDM

—MS20/MS21



#### Analysis software

- Compliant with FDA 21 CFR Part 11
- Data integrity in accordance with ALCOA+
- Supports SQL databases

## Connectivity

### SWA70



#### WirelessHART® adapter

- Fast upgrade of HART® devices to WirelessHART® technology
- Wireless transmission of 4 ... 20 mA/HART® signals
- ATEX, CSA, IEC Ex, JPN Ex, UKCA

### SWG50



#### WirelessHART® Fieldgate

- WirelessHART® network management with up to 100 wireless field devices
- Modbus TCP and HART-IP
- Compact housing IP20 (DIN-rail)
- Netilion compatible with FieldEdge SGC500
- ATEX, IECEx, cCSAus

### SMT70B



#### Tablet PC for device configuration

- HART®, PROFIBUS DP/PA, FOUNDATION Fieldbus, Modbus protocols
- Connection to Netilion (Endress+Hauser IIoT ecosystem)
- ATEX, NEC/CEC, IECEx, NEPSI, JPN, INMETRO

### SMT50



#### Tablet PC for Field Xpert

- WLAN + WWAN LTE+GPS for EU / US
- Application in non-Ex areas

### SFG250



#### Ethernet HART® gateway

- For remote monitoring and configuration
- Integrated web server
- UL

### SFG500



#### Ethernet/PROFINET®, PROFIBUS® gateway

- Ethernet/PROFIBUS DP gateway with integrated web server
- Monitoring of PROFIBUS and HART® device status
- Fieldgate modules SFM500: display of process values and diagnostics

### SGC500



#### FieldEdge

- PROFIBUS, HART®, WirelessHART® in conjunction with Fieldgates
- Connection to Netilion (Endress+Hauser IIoT ecosystem)
- PROFINET, Ethernet/IP, Modbus TCP

### SGC200



#### FieldEdge

- Bluetooth®/LTE
- API (Application Programming Interface)
- Connection to Netilion (Endress+Hauser IIoT ecosystem)

### SWA50



#### BT/Wireless HART® adapter (FieldPort)

- Converts HART® signal of field device to Bluetooth® or Wireless HART® signal
- 2- and 4-wire HART® field devices
- ATEX, IECEx

### Further information



#### Everything at a glance

Find out everything you need  
to know about system products  
and data managers

[www.endress.com/systemproducts](http://www.endress.com/systemproducts)

### Downloads



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