

# 1-/2-channel transmitter

## Liquiline CM442R

Compact multiparameter DIN-rail and cabinet device for all industries



More information and current pricing:

[www.apsc.endress.com/CM442R](http://www.apsc.endress.com/CM442R)

### Benefits:

- **Saves space, saves money:**  
Extremely small footprint, saves space in cabinets – perfect for skids.
- **High-speed installation:**  
No cut-out in cabinet door, one-click DIN-rail mounting, minimized wiring.
- **Simple and safe commissioning:**  
Saving configuration on SD card enables fast set-up on duplicate installations.
- **Easy to operate and service:**  
Intuitive user interface, hot plug & play with pre-calibrated Memosens sensors, universal components fit all parameters.
- **Process control from a distance:**  
Integrated web server that allows the operator to remotely view diagnostic data, perform configurations, or access device parameters in any web browser - even via Smartphone.
- **Higher availability, lower costs:**  
Heartbeat Technology enables status-oriented maintenance and easy verification of the entire measuring point and helps to carry out optimization measures.

### Specs at a glance

- **Input** 1 to 2x Memosens digital input 2x 0/4 to 20mA Input optional 2x Digital input optional
- **Output / communication** 2 to 8x 0/4 to 20 mA current outputs Alarmrelay, 2x relay, ProfibusDP, Modbus RS485, Modbus TCP, Ethernet
- **Ingres protection** Transmitter: IP20 Optional Display: IP66

**Field of application:** Liquiline CM442R is an easy-to-use, digital multiparameter transmitter for process monitoring and control in all applications - even where mounting space is limited. It saves you time and money through simplified and quick system integration, installation, and handling. The 1-/2-channel controller is extremely compact and fits in every cabinet. Liquiline CM442R provides you with all the benefits of a best-in-class transmitter platform from clever simplicity to maximum process safety.

## Features and specifications

pH

### Measuring principle

Potentiometric

### Application

Modular 4 wire controller

Multichannel: 1/2 digital channels for Memosens protocol

Multiparameter: pH, redox, ISFET, conductivity inductive and conductive, dissolved oxygen, nitrate and turbidity

Two sensors connectable in any combination

Functionality modular extendable at any time

Plug and play for modules and sensors

### Characteristic

Robust plastic housing

All non-ex applications

### Design

2x Memosens input, 2 to 4x current output, alarmrelay

2x relay, SD card for software update and copy & paste of setup

### Material

DIN rail housing: PC-FR

Display seal: EPDM

pH

**Dimension**

99 x 100 x 97 mm  
3.9 x 3.94 x 3.82 inch

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**Process temperature**

0 to 60 °C (32 to 140 °F)

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**Ingres protection**

Transmitter: IP20  
Optional Display: IP66

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**Input**

1 to 2x Memosens digital input  
2x 0/4 to 20mA Input optional  
2x Digital input optional

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**Output / communication**

2 to 8x 0/4 to 20 mA current outputs  
Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,  
Modbus TCP, Ethernet

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**Additional certifications**

EAC, cCSAus

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ORP / Redox

**Measuring principle**

Sensor ORP / Redox

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## ORP / Redox

**Characteristic**

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## Sludge Level

### Measuring principle

Ultrasonic sensor

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## Sludge Level

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## Disinfection

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### Measuring principle

Total chlorine

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## Conductivity

**Measuring principle**

Potentiometric

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## Turbidity

**Measuring principle**

Single beam scattered light



## Turbidity

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## Oxygen

**Measuring principle**

Amperometric oxygen measurement

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