

# 8-channel transmitter Liquiline CM448R

Flexible multiparameter DIN-rail and cabinet device for all industries



More information and current pricing:

[www.at.endress.com/CM448R](http://www.at.endress.com/CM448R)

## Benefits:

- **Saves space, saves money:**  
Small footprint, 8 channels in one device, 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...8x Memosens digital input 2x 0/4...20mA Input optional 2..4x Digital input optional
- **Output / communication** 2...8x 0/4...20 mA current outputs alarmrelay 4x relay ProfibusDP Modbus RS485 Modbus TCP Ethernet

- **Ingres protection** IP20 transmitter IP66 optional Display

**Field of application:** Liquiline CM448R allows you to connect up to 8 Memosens sensors of your choice from over 12 measurement parameters. With its compact design, it fits into any cabinet - and even offers inputs, outputs, controllers, and math modules, e.g. for control of sensor cleaning. The transmitter belongs to the Liquiline platform with standardized system integration, operation, and spare parts. Heartbeat Technology helps you find the ideal balance between measurement point availability and maintenance costs.

## Features and specifications

pH

### Measuring principle

Potentiometric

### Application

Modular 4 wire controller

Multichannel: 1-8 digital channels for Memosens protocol

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

8 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

8x Memosens input

2...8x current output

alarmrelay

2x relay

SD card for software update and copy & paste of setup

pH

**Material**

Polycarbonate

**Dimension**

220 (8.66) x 100 (3.94) x 98 (3.86) mm (inch)

**Process temperature**

-20...55°C / 0...130°F

**Ingres protection**

IP20 transmitter

IP66 optional Display

**Input**

1...8x Memosens digital input

2x 0/4...20mA Input optional

2..4x Digital input optional

**Output / communication**

2...8x 0/4...20 mA current outputs

alarmrelay

4x relay

ProfibusDP

Modbus RS485

Modbus TCP

Ethernet

ORP / Redox

**Measuring principle**

Sensor ORP / Redox

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**ORP / Redox****Application**

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220 (8.66) x 100 (3.94) x 98 (3.86) mm (inch)

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**Process temperature**

-20...55°C / 0...130°F

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**Ingres protection**

IP20 transmitter

IP66 optional Display

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**Input**

1...8x Memosens digital input

2x 0/4..20mA Input optional

2..4x Digital input optional

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**ORP / Redox****Output / communication**

2...8x 0/4...20 mA current outputs  
alarmrelay  
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ProfibusDP  
Modbus RS485  
Modbus TCP  
Ethernet

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**Conductivity****Measuring principle**

Conductive

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Functionality modular extendable at any time  
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**Characteristic**

Robust plastic housing  
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**Design**

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2...8x current output  
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2x relay  
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**Material**

Polycarbonate

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## Conductivity

**Dimension**

220 (8.66) x 100 (3.94) x 98 (3.86) mm (inch)

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**Process temperature**

-20...55°C / 0...130°F

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**Ingres protection**

IP20 transmitter

IP66 optional Display

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**Input**

1...8x Memosens digital input

2x 0/4...20mA Input optional

2..4x Digital input optional

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**Output / communication**

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## Oxygen

**Measuring principle**

Amperometric oxygen measurement

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**Application**

Modular 4 wire controller

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

8 sensors connectable in any combination

Functionality modular extendable at any time

Plug and play for modules and sensors

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## Oxygen

**Characteristic**

Robust plastic housing  
All non-ex applications

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**Design**

8x Memosens input  
2...8x current output  
alarmrelay  
2x relay  
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**Material**

Polycarbonate

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**Dimension**

220 (8.66) x 100 (3.94) x 98 (3.86) mm (inch)

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**Process temperature**

-20...55°C / 0...130°F

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**Input**

1...8x Memosens digital input  
2x 0/4...20mA Input optional  
2..4x Digital input optional

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**Output / communication**

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## Disinfection

**Measuring principle**

Total chlorine

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## Disinfection

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### Characteristic

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### Material

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### Dimension

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### Process temperature

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### Input

1...8x Memosens digital input

2x 0/4...20mA Input optional

2..4x Digital input optional

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## Disinfection

### Output / communication

2...8x 0/4...20 mA current outputs  
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## Turbidity

### Measuring principle

Single beam scattered light

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### Characteristic

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All non-ex applications

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### Design

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### Material

Polycarbonate

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**Turbidity****Dimension**

220 (8.66) x 100 (3.94) x 98 (3.86) mm (inch)

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**Process temperature**

-20...55°C / 0...130°F

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**Ingres protection**

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**Input**

1...8x Memosens digital input

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**Output / communication**

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**Sludge Level****Measuring principle**

Ultrasonic sensor

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Modular 4 wire controller

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## Sludge Level

### Characteristic

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All non-ex applications

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### Design

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### Material

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### Dimension

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### Ingres protection

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