

# 8-channel transmitter

## Liquiline CM448

Flexible multiparameter field device for all industries



More information and current pricing:

[www.endress.com/CM448](http://www.endress.com/CM448)

### Benefits:

- **Clever simplicity:**  
One controller for all parameters and applications, intuitive user interface, automatic sensor recognition, hot plug & play with pre-calibrated Memosens sensors.
- **Complete package:**  
8 channels in one device provide the highest flexibility for every measuring task.
- **Seamless system integration:**  
Unique portfolio of communication standards suits every distributed control system (DCS).
- **Simple and safe commissioning:**  
Saving configuration on SD card enables fast set-up on duplicate installations.
- **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 8x Memosens digital input 2x 0/4 to 20mA Input optional 2 to 4x Digital input optional

**Output / communication** 2 to 8x 0/4 to 20 mA current outputs, alarmrelay 4x relay, ProfibusDP, Modbus RS485, Modbus TCP, Ethernet

▪ **Ingress protection** IP66 / IP67

**Field of application:** The Liquiline CM448 transmitter allows you to connect up to 8 Memosens sensors of your choice from over 12 measurement parameters. It offers automatic sensor recognition, simple operation, and standardized spare parts with all other devices of the Liquiline platform. With its inputs, outputs, controllers, and math modules, you can even control cleaning systems or dosing pumps. Heartbeat Technology helps you find the ideal balance between measuring point availability and maintenance costs.

## Features and specifications

pH

### Measuring principle

Potentiometric

### Application

Modular 4 wire controller

Multichannel: 1 to 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 to 8x current output,

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

## pH

**Material**

Housing base: PC-FR

Housing seal EPDM

**Dimension**

237 x 194 x 162 mm

9.33 x 7.64 x 6.38 inch

**Process temperature**

-20 to 55 °C (0 to 130 °F)

**Ingress protection**

IP66 / IP67

**Input**

1 to 8x Memosens digital input

2x 0/4 to 20mA Input optional

2 to 4x Digital input optional

**Output / communication**

2 to 8x 0/4 to 20 mA current outputs, alarmrelay

4x relay, ProfibusDP, Modbus RS485, Modbus TCP, Ethernet

**Additional certifications**

EAC, cCSAus

## ORP / Redox

**Measuring principle**

Sensor ORP / Redox

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## ORP / Redox

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Robust plastic housing  
All non-ex applications

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setup

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### Material

Housing base: PC-FR  
Housing seal EPDM

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### Dimension

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9.33 x 7.64 x 6.38 inch

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### Output / communication

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4x relay, ProfibusDP, Modbus RS485, Modbus TCP, Ethernet

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### Additional certifications

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## Conductivity

### Measuring principle

Conductive

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## Conductivity

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## Conductivity

### Additional certifications

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## Oxygen

### Measuring principle

Amperometric oxygen measurement

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Plug and play for modules and sensors

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### Characteristic

Robust plastic housing

All non-ex applications

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### Design

8x Memosens input, 2 to 8x current output,

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### Material

Housing base: PC-FR

Housing seal EPDM

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### Dimension

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9.33 x 7.64 x 6.38 inch

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### Process temperature

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## Oxygen

### Input

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

### Output / communication

2 to 8x 0/4 to 20 mA current outputs, alarmrelay  
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## Disinfection

### Measuring principle

Free chlorine

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Plug and play for modules and sensors

### Characteristic

Robust plastic housing  
All non-ex applications

### Design

8x Memosens input, 2 to 8x current output,  
Alarmrelay, 2x relay, SD card for software update and copy & paste of setup

### Material

Housing base: PC-FR  
Housing seal EPDM

## Disinfection

### Dimension

237 x 194 x 162 mm  
9.33 x 7.64 x 6.38 inch

### Process temperature

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## Turbidity

### Measuring principle

Single beam scattered light

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### Characteristic

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All non-ex applications



## Turbidity

### Design

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4x relay, ProfibusDP, Modbus RS485, Modbus TCP, Ethernet

### Additional certifications

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## Analyser

### Measuring principle

Potentiometric / ISE

### Characteristic

Robust plastic housing  
All non-ex applications

## Analyser

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### Application

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