

# 4-channel transmitter

## Liquiline CM444

Expandable multiparameter field device for all industries



More information and current pricing:

[www.ie.endress.com/CM444](http://www.ie.endress.com/CM444)

### Benefits:

- **Clever simplicity:**  
One controller for all parameters and applications, intuitive user interface, automatic sensor recognition, hot plug & play with pre-calibrated Memosens sensors.
- **Highest flexibility:**  
Universal modules for all parameters minimize spare part stock and allow for easy 1-click extension to up to 8 channels at any time.
- **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 4x 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

- **Ingres protection** IP66 / IP 67

**Field of application:** The Liquiline CM444 transmitter allows you to connect up to 4 Memosens sensors of your choice from over 12 measurement parameters. It offers automatic sensor recognition, flexible expandability, 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 4 digital channels for Memosens protocol

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

4 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

2 to 4x Memosens input, 2 to 8x current output

Alarmrelay, 4x 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)

**Ingres protection**

IP66 / IP 67

**Input**

1 to 4x 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

**Characteristic**

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All non-ex applications

**Design**

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**Material**

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## Conductivity

**Measuring principle**

Conductive

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## Conductivity

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## Conductivity

**Output / communication**

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## Oxygen

**Measuring principle**

Amperometric oxygen measurement

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**Characteristic**

Robust plastic housing

All non-ex applications

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**Design**

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**Material**

Housing base: PC-FR

Housing seal: EPDM

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**Dimension**

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## Oxygen

**Process temperature**

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## Disinfection

**Measuring principle**

Free chlorine

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**Characteristic**

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## Disinfection

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## Turbidity

### Measuring principle

Single beam scattered light

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## Turbidity

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## Sludge Level

### Measuring principle

Ultrasonic sensor

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## Sludge Level

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## Analyser

**Measuring principle**

Potentiometric / ISE

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