

# 1-/2-channel transmitter

## Liquiline CM442

Expandable multiparameter field device for all industries



More information and current pricing:

[www.be.endress.com/CM442](http://www.be.endress.com/CM442)

### Benefits:

- **Clever simplicity:**  
One controller for all parameters and applications, intuitive user interface, automatic sensor recognition, hot plug & play with pre-calibrated Memosens sensors.
- **High flexibility:**  
Universal modules for all parameters minimize spare part stock and allow for easy 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 2x Memosens digital input
- **Output / communication** 2 to 4x 0/4 to 20 mA current outputs  
Alarmrelay, 2x relay
- **Ingress protection** IP66 / IP67

**Field of application:** Liquiline CM442 is a digital multiparameter transmitter for process monitoring and controlling in any application. The 1-/2-channel controller saves you time and money by offering seamless system integration, simple operation and a reduced need for spare part stock. Liquiline CM442 provides you with all the benefits of a best-in-class transmitter platform from clever simplicity to maximum process safety.

## Features and specifications

### Disinfection

#### Measuring principle

Free chlorine

#### 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

Housing base: PC-FR

Housing seal: EPDM

#### Dimension

237 x 194 x 162 mm

9.33 x 7.64 x 7.38 inch

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## Disinfection

**Process temperature**

-20 to 60 °C (0 to 140 °F)

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**Input**

1 to 2x Memosens digital input

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**Output / communication**

2 to 4x 0/4 to 20 mA current outputs  
Alarmrelay, 2x relay

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**Additional certifications**

EAC, cCSAus, MCERTS

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## ORP / Redox

**Measuring principle**

Sensor ORP / Redox

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

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## ORP / Redox

**Dimension**

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**Process temperature**

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**Ingres protection**

IP66 / IP67

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**Output / communication**

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Alarmrelay, 2x relay

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## Sludge Level

**Measuring principle**

Ultrasonic sensor

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## Sludge Level

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2x Memosens input, 2 to 4x current output, Alarmrelay  
2x relay, SD card for software update and copy & paste of setup

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### Ingres protection

IP66 / IP67

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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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## Conductivity

### Measuring principle

Potentiometric

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## Conductivity

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### Output / communication

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

Alarmrelay, 2x relay

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**Conductivity****Additional certifications**EAC, cCSAus, MCERTS

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**pH****Measuring principle**Potentiometric

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## pH

**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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## Turbidity

**Measuring principle**

Four beam alternating light

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## Turbidity

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2x 0/4 to 20mA input optional  
2x Digital input optional

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**Output / communication**

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Alarmrelay, 2x relay

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## Oxygen

**Measuring principle**

Amperometric oxygen measurement

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## Oxygen

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## Analyser

### Measuring principle

UV photometric

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