8-channel transmitter
Liquilime CM448R

Flexible multiparameter DIN-rail and cabinet device for all industries

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

More information and current pricing:
www.us.endress.com/CM448R
**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**

<table>
<thead>
<tr>
<th>pH</th>
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**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

**Ingress 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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Conductivity

Measuring principle
Conductive

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Polycarbonate
**Conductivity**

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**Oxygen**

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**Oxygen**

**Characteristic**
Robust plastic housing
All non-ex applications

**Design**
8x Memosens input
2...8x current output
alarm relay
2x relay
SD card for software update and copy & paste of setup

**Material**
Polycarbonate

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

**Process temperature**
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**Disinfection**

**Measuring principle**
Total chlorine
Disinfection

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**Disinfection**

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**Turbidity**

**Measuring principle**
- Single beam scattered light

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- 8 sensors connectable in any combination
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**Characteristic**
- Robust plastic housing
- All non-ex applications

**Design**
- 8x Memosens input
- 2...8x current output
- alarmrelay
- 2x relay
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**Material**
- Polycarbonate
**Turbidity**

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**Sludge Level**

**Measuring principle**
Ultrasonic sensor

**Application**
Modular 4 wire controller
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### Sludge Level

**Characteristic**
- Robust plastic housing
- All non-ex applications

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