4-channel transmitter
Liquiline CM444R

Expandable multiparameter DIN-rail and cabinet device for all industries

Benefits:

- **Saves space, saves money:**
  Small footprint, 4 channels in one device, expandable at any time, 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 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
**Field of application:** Liquiline CM444R allows you to connect up to 4 Memosens sensors of your choice from over 12 measurement parameters. With its compact design, it fits into any cabinet and can be expanded at any time with inputs, outputs, controllers, math modules, and sensor channels. 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 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

**Material**
DIN rail housing: PC-FR
Display seal: EPDM

**Ingress protection**
Transmitter: IP20
Optional Display: IP66
**pH**

**Dimension**
220 x 100 x 97 mm  
8.66 x 3.94 x 3.82 inch

**Process temperature**
0 to 55 °C (32 to 130 °F)

**Ingress protection**
Transmitter: IP20  
Optional Display: IP66

**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

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**ORP / Redox**

**Measuring principle**
Sensor ORP / Redox

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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
- Alarm relay, 4x relay, SD card for software update and copy & paste of setup

**Material**
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**Additional certifications**
- EAC, cCSAus
**Conductivity**

**Measuring principle**
Conductive

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**Characteristic**
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All non-ex applications

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Optional Display: IP66
Conductivity

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Additional certifications
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Oxygen

Measuring principle
Amperometric oxygen measurement

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

Material
DIN rail housing: PC-FR
Display seal: EPDM
Oxygen

**Dimension**
220 x 100 x 97 mm
8.66 x 3.94 x 3.82 inch

**Process temperature**
0 to 55 °C (32 to 130 °F)

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2x 0/4 to 20mA Input optional
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Disinfection

**Measuring principle**
Total chlorine

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dissolved oxygen, nitrate and turbidity
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Functionality modular extendable at any time
Plug and play for modules and sensors

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

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Turbidity

**Measuring principle**
Single beam scattered light
Turbidity

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Characteristic
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All non-ex applications

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Ingress protection
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### Turbidity

**Output / communication**
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### Sludge Level

**Measuring principle**
Ultrasonic sensor

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### Sludge Level

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More information [www.us.endress.com/CM444R](http://www.us.endress.com/CM444R)