

1-/2-channel transmitter

Liquiline CM442R

Compact multiparameter DIN-rail and cabinet device for all industries



More information and current pricing:

www.be.endress.com/CM442R

Benefits:

- **Saves space, saves money:**
Extremely small footprint, 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 2x Memosens digital input 2x 0/4 to 20mA Input optional 2x Digital input optional
- **Output / communication** 2 to 8x 0/4 to 20 mA current outputs Alarmrelay, 2x relay, ProfibusDP, Modbus RS485, Modbus TCP, Ethernet
- **Ingres protection** Transmitter: IP20 Optional Display: IP66

Field of application: Liquiline CM442R is an easy-to-use, digital multiparameter transmitter for process monitoring and control in all applications - even where mounting space is limited. It saves you time and money through simplified and quick system integration, installation, and handling. The 1-/2-channel controller is extremely compact and fits in every cabinet. Liquiline CM442R provides you with all the benefits of a best-in-class transmitter platform from clever simplicity to maximum process safety.

Features and specifications

Turbidity

Measuring principle

Single beam scattered light

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

DIN rail housing: PC-FR

Display seal: EPDM

Turbidity

Dimension

99 x 100 x 97 mm
3.9 x 3.94 x 3.82 inch

Process temperature

0 to 60 °C (32 to 140 °F)

Ingres protection

Transmitter: IP20
Optional Display: IP66

Input

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

Output / communication

2 to 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,
Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

Sludge Level

Measuring principle

Ultrasonic sensor

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

Sludge Level

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

DIN rail housing: PC-FR
Display seal: EPDM

Dimension

99 x 100 x 97 mm
3.9 x 3.94 x 3.82 inch

Process temperature

0 to 60 °C (32 to 140 °F)

Ingres protection

Transmitter: IP20
Optional Display: IP66

Input

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

Output / communication

2 to 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,
Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

ORP / Redox

Measuring principle

Sensor ORP / Redox

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

DIN rail housing: PC-FR

Display seal: EPDM

Dimension

99 x 100 x 97 mm

3.9 x 3.94 x 3.82 inch

Process temperature

0 to 60 °C (32 to 140 °F)

Ingres protection

Transmitter: IP20

Optional Display: IP66

Input

1 to 2x Memosens digital input

2x 0/4 to 20mA Input optional

2x Digital input optional

ORP / Redox**Output / communication**

2 to 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,
Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

Oxygen**Measuring principle**

Amperometric oxygen measurement

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

DIN rail housing: PC-FR
Display seal: EPDM

Dimension

99 x 100 x 97 mm
3.9 x 3.94 x 3.82 inch

Oxygen

Process temperature

0 to 60 °C (32 to 140 °F)

Input

1 to 2x Memosens digital input

2x 0/4 to 20mA Input optional

2x Digital input optional

Output / communication

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

Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,

Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

Disinfection

Measuring principle

Total 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

Disinfection

Material

DIN rail housing: PC-FR

Display seal: EPDM

Dimension

99 x 100 x 97 mm

3.9 x 3.94 x 3.82 inch

Process temperature

0 to 60 °C (32 to 140 °F)

Input

1 to 2x Memosens digital input

2x 0/4 to 20mA Input optional

2x Digital input optional

Output / communication

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

Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,

Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

pH

Measuring principle

Potentiometric

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

pH

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

DIN rail housing: PC-FR
Display seal: EPDM

Dimension

99 x 100 x 97 mm
3.9 x 3.94 x 3.82 inch

Process temperature

0 to 60 °C (32 to 140 °F)

Ingres protection

Transmitter: IP20
Optional Display: IP66

Input

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

Output / communication

2 to 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,
Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

Conductivity

Measuring principle

Potentiometric

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

DIN rail housing: PC-FR

Display seal: EPDM

Dimension

99 x 100 x 97 mm

3.9 x 3.94 x 3.82 inch

Process temperature

0 to 60 °C (32 to 140 °F)

Ingres protection

Transmitter: IP20

Optional Display: IP66

Input

1 to 2x Memosens digital input

2x 0/4 to 20mA Input optional

2x Digital input optional

Conductivity

Output / communication

2 to 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay, ProfibusDP, Modbus RS485,
Modbus TCP, Ethernet

Additional certifications

EAC, cCSAus

More information www.be.endress.com/CM442R