

1-/2-channel transmitter

Liquiline CM442

Expandable multiparameter field device for all industries



More information and current pricing:

www.si.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 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay
- **Ingress protection** IP66 / IP67

Field of application: The Liquiline CM442 transmitter allows you to connect up to 2 Memosens sensors of your choice from over 12 measurement parameters. It offers automatic sensor recognition, easy operation, 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

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

Housing base: PC-FR

Housing seal: EPDM

ORP / Redox

Dimension

237 x 194 x 162 mm
9.33 x 7.64 x 7.38 inch

Process temperature

-20 to 60 °C (0 to 140 °F)

Ingres protection

IP66 / IP67

Input

1 to 2x Memosens digital input

Output / communication

2 to 8x 0/4 to 20 mA current outputs
Alarmrelay, 2x relay

Additional certifications

EAC, cCSAus, MCERTS

pH

Measuring principle

Potentiometric

Application

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Characteristic

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All non-ex applications

pH

Design

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

Material

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Housing seal: EPDM

Dimension

237 x 194 x 162 mm
9.33 x 7.64 x 7.38 inch

Process temperature

-20 to 60 °C (0 to 140 °F)

Ingres protection

IP66 / IP67

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, MCERTS

Conductivity

Measuring principle

Conductive

Conductivity

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

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9.33 x 7.64 x 7.38 inch

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IP66 / IP67

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Output / communication

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Alarmrelay, 2x relay

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

Sludge Level**Measuring principle**Ultrasonic sensor

Application

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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

Process temperature-20 to 60 °C (0 to 140 °F)

Ingres protectionIP66 / IP67

Sludge Level

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

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Oxygen

Measuring principle

Amperometric oxygen measurement

Application

Modular 4 wire controller
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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

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

Oxygen**Dimension**

237 x 194 x 162 mm
9.33 x 7.64 x 7.38 inch

Process temperature

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Ingres protection

IP67

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Output / communication

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Additional certifications

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Analyser**Measuring principle**

UV photometric

Characteristic

Robust plastic housing
All non-ex applications

Design

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Analyser

Application

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Output / communication

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Alarmrelay, 2x relay

Input

1 to 2x Memosens digital input

Disinfection

Measuring principle

Free chlorine

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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

Housing base: PC-FR

Housing seal: EPDM

Dimension

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Input

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Output / communication

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Alarmrelay, 2x relay

Additional certifications

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Turbidity

Measuring principle

Four beam alternating light

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Turbidity

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