

8-channel transmitter Liquiline CM448

Flexible multiparameter field device for all industries



More information and current pricing:

www.at.endress.com/CM448

Benefits:

- **Clever simplicity:**
One controller for all parameters and applications, intuitive user interface, automatic sensor recognition, hot plug & play with pre-calibrated Memosens sensors.
- **Complete package:**
8 channels in one device provide the highest flexibility for every measuring task.
- **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 8x 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

- **Ingres protection** IP66 / IP67

Field of application: Liquiline CM448 is a digital multiparameter transmitter for process monitoring and controlling in any application. The 8-channel controller saves you time and money by offering seamless system integration, simple operation and a reduced need for spare part stock. Adapt the controller exactly to your measuring task and connect 1 to 8 sensors as desired. Liquiline CM448 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 to 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 to 8x 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

237 x 194 x 162 mm

9.33 x 7.64 x 6.38 inch

Process temperature

-20 to 55 °C (0 to 130 °F)

Input

1 to 8x 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

Oxygen

Measuring principle

Amperometric oxygen measurement

Application

Modular 4 wire controller

Multichannel: 1 to 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

Oxygen

Characteristic

Robust plastic housing
All non-ex applications

Design

8x Memosens input, 2 to 8x 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 6.38 inch

Process temperature

-20 to 55 °C (0 to 130 °F)

Input

1 to 8x 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

Analyser

Measuring principle

Potentiometric / ISE

Analyser

Characteristic

Robust plastic housing
All non-ex applications

Process temperature

-20 to 55 °C (0 to 130 °F)

Application

Modular 4 wire controller
Multichannel: 1 to 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

Output / communication

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

Input

1 to 8x Memosens digital input
2x 0/4 to 20mA Input optional
2 to 4x Digital input optional

Conductivity

Measuring principle

Potentiometric

Application

Modular 4 wire controller
Multichannel: 1 to 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

Conductivity

Characteristic

Robust plastic housing
All non-ex applications

Design

8x Memosens input, 2 to 8x 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 6.38 inch

Ingres protection

IP66 / IP67

Input

1 to 8x 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

pH

Measuring principle

Potentiometric

pH

Application

Modular 4 wire controller

Multichannel: 1 to 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 to 8x 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 6.38 inch

Process temperature

-20 to 55 °C (0 to 130 °F)

Ingres protection

IP66 / IP67

Input

1 to 8x Memosens digital input

2x 0/4 to 20mA Input optional

2 to 4x Digital input optional

pH

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

Turbidity

Measuring principle

Single beam scattered light

Application

Modular 4 wire controller
Multichannel: 1 to 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 to 8x 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 6.38 inch

Turbidity**Process temperature**

-20 to 55 °C (0 to 130 °F)

Ingres protection

IP66 / IP67

Input

1 to 8x 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

ORP / Redox**Measuring principle**

Sensor ORP / Redox

Application

Modular 4 wire controller

Multichannel: 1 to 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

ORP / Redox

Design

8x Memosens input, 2 to 8x 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 6.38 inch

Process temperature

-20 to 55 °C (0 to 130 °F)

Ingres protection

IP66 / IP67

Input

1 to 8x 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

More information www.at.endress.com/CM448