

# 1-channel transmitter

## Liquiline M CM42

Two-wire field device for hazardous and non-hazardous area use in chemicals, life sciences and food



More information and current pricing:

[www.at.endress.com/CM42](http://www.at.endress.com/CM42)

### Benefits:

- Simple commissioning with quick setup and navigator
- The Memosens technology allows plug & play with pre-calibrated Memosens sensors
- Less storage thanks to modular design
- Predictive maintenance system detects when a sensor has to be cleaned, calibrated or replaced

### Specs at a glance

- **Input** One or two channel transmitter (with one reference connection)
- **Output / communication** 1/2 x 4 to 20 mA, HART, Profibus PA, FF Additional second output possible, also later
- **Ingres protection** IP66/67, NEMA 4X

**Field of application:** Liquiline M CM42 is the robust transmitter for pH/ ORP, conductivity or oxygen measurement in all process applications. It is the best choice for demanding environments be it hygienic applications, hazardous areas or functional safety areas. Liquiline's intuitive operating concept simplifies commissioning, handling, and maintenance saving you time every day. Easy switching of parameters and seamless system integration give you the flexibility to adapt it exactly to your measuring task.

### Features and specifications

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## Conductivity

### Measuring principle

Potentiometric

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### Application

Chemical processes, pharmaceuticals industry, foodstuff technology, applications in hazardous areas

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### Characteristic

Liquiline M CM42 is a modular two-wire transmitter for all areas of process engineering

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### Measuring principle

Resistance measurement

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### Design

Depending on the ordered version, Liquiline M CM42 has one or two analog current outputs or it can be connected to field busses as per FOUNDATION Fieldbus, PROFIBUS PA and HART protocol  
Liquiline is developed acc. to the international safety standard IEC 61508

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### Material

Plastic or stainless steel housing with EPDM sealings

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### Dimension

Plastic housing:  
144 x 144 x 148 mm  
5.67 x 5.67 x 5.83 inch  
Stainless Steel:  
174 x 174 x 134 mm  
6.85 x 6.85 x 5.28 inch

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### Temperature sensor

Applicable:  
Pt100, Pt1000

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### Ex certification

ATEX, IECEx, FM, CSA, NEPSI, EAC, UKEx, JPN Ex

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**Conductivity****Ingres protection**

IP66/67, NEMA 4X

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**Input**

One or two channel transmitter (with one reference connection)

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**Output / communication**1/2 x 4 to 20 mA, HART, Profibus PA, FF  
Additional second output possible, also later

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**pH****Measuring principle**

Potentiometric

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**Application**Chemical processes, pharmaceuticals industry, foodstuff technology,  
applications in hazardous areas

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**Characteristic**Liquiline M CM42 is a modular two-wire transmitter for all areas of  
process engineering

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**Measuring principle**

Potentiometric pH measurement

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**Design**Depending on the ordered version, Liquiline M CM42 has one or two  
analog current outputs or it can be connected to field busses as per  
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**Material**

Plastic or stainless steel housing with EPDM sealings

## pH

**Dimension**

Plastic housing:

144 x 144 x 148 mm

5.67 x 5.67 x 5.83 inch

Stainless Steel:

174 x 174 x 134 mm

6.85 x 6.85 x 5.28 inch

**Temperature sensor**

Applicable:

Pt100, Pt1000, NTC 30K

**Ex certification**

: ATEX, IECEx, FM, CSA, NEPSI, EAC, UKEx, JPN Ex

**Ingres protection**

IP66/67, NEMA 4X

**Input**

One or two channel transmitter (with one reference connection)

**Output / communication**

1/2 x 4 to 20 mA, HART, Profibus PA, FF

Additional second output possible, also later

## ORP / Redox

**Measuring principle**

Sensor ORP / Redox

**Application**

Chemical processes, pharmaceuticals industry, foodstuff technology, applications in hazardous areas

**Characteristic**

Liquiline M CM42 is a modular two-wire transmitter for all areas of process engineering

## ORP / Redox

**Measuring principle**

ORP measurement

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**Design**

Depending on the ordered version, Liquiline M CM42 has one or two analog current outputs or it can be connected to field busses as per FOUNDATION Fieldbus, PROFIBUS PA and HART protocol  
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**Material**

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**Dimension**

Plastic housing:

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Stainless Steel:

174 x 174 x 134 mm

6.85 x 6.85 x 5.28 inch

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**Temperature sensor**

Applicable:

Pt100, Pt1000, NTC 30K

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**Ex certification**

ATEX, IECEx, FM, CSA, NEPSI, EAC, UKEx, JPN Ex

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**Ingres protection**

IP66/67, NEMA 4X

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**Input**

One or two channel transmitter (with one reference connection)

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**Output / communication**

1/2 x 4 to 20 mA, HART, Profibus, FF

Additional second output possible, also later

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## Oxygen

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### Measuring principle

Amperometric oxygen measurement

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### Application

Chemical processes, pharmaceuticals industry, foodstuff technology, applications in hazardous areas

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### Characteristic

Liquiline M CM42 is a modular two-wire transmitter for all areas of process engineering

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### Measuring principle

Connection of oxygen sensors with Memosens coupling

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### Design

Depending on the ordered version, Liquiline M CM42 has one or two analog current outputs or it can be connected to field busses as per FOUNDATION Fieldbus, PROFIBUS PA and HART protocol  
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### Ex certification

ATEX, IECEx, FM, CSA, NEPSI, EAC, UKEx, JPN Ex

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### Ingres protection

IP66/67, NEMA4X

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### Input

One or two channel transmitter (with one reference connection)

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## Oxygen

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### Output / communication

1/2 x 4 to 20 mA, HART, Profibus PA, FF

Additional second output possible, also later

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More information [www.at.endress.com/CM42](http://www.at.endress.com/CM42)