

# 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.fi.endress.com/CM42](http://www.fi.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 channel transmitter for Memosens and analog (pH, ORP, conductivity)
- **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

pH

**Measuring principle**

ISFET

**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

**Measuring principle**

Potentiometric pH measurement

**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

**Material**

Plastic or stainless steel housing with EPDM sealings

**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

pH

**Ingres protection**

IP66/67, NEMA 4X

**Input**

One channel transmitter for Memosens and analog (pH, ORP, conductivity)

**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

**Measuring principle**

ORP measurement

**Design**

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**ORP / Redox****Dimension**

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Applicable:  
Pt100, Pt1000, NTC 30K

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**Ingres protection**

IP66/67, NEMA 4X

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**Input**

One channel transmitter for Memosens and analog (pH, ORP, conductivity)

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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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**Conductivity****Measuring principle**

Conductive

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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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## Conductivity

### Measuring principle

Resistance measurement

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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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### Ingres protection

IP66/67, NEMA 4X

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### Input

One channel transmitter for Memosens and analog (pH, ORP, conductivity)

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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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## 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**

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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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## Oxygen

### Input

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### Output / communication

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