Intelligent Transmitter Series
For Hazardous Area Applications

Outstanding Reliability and Process Safety

- ISM technology with sensor diagnostics
- Approvals for hazardous area applications
- Dependable usage in harsh environments thanks to rugged design

Predictive Maintenance

- Advanced ISM functionality provides predictive maintenance
- Online diagnostics
- Remote access to sensor diagnostic tools over HART or second analog output

Easy Handling of Measuring Loops

- Fast commissioning and error-free start-up due to Plug and Measure feature
- Pre-calibration of sensors with iSense Asset Suite software

Versatility

- Multi-parameter transmitter
- Mixed-mode input for use with analog or innovative digital ISM sensors
- Compatible with major asset management tools
- Remote and on-site access to sensor diagnostic tools

Reliable Solution with Remote Access to Sensor Diagnostics

The M400 2-wire multi-parameter transmitter, equipped with Intelligent Sensor Management (ISM) technology, provides highest reliability and process safety. Its rugged design and global hazardous area approvals allow use of the transmitter across the chemical and chempharma industries. Easiest handling and local or remote access over HART to advanced sensor diagnostic tools leads to reduced operating costs and increased productivity.

The M400 transmitter is a single-channel unit for pH/ORP, oxygen and conductivity measurement. Its mixed-mode input allows the use of analog or ISM sensors. This unique feature means the M400 offers a smooth technology transition from analog to digital sensors and provides a future oriented investment in the plant.
Technical data of the M400 2-wire transmitter series

Measurement parameters: pH/ORP, pH/pNa, dissolved oxygen, gas phase oxygen, conductivity (2e/4e), dissolved carbon dioxide

ISM features: Plug and Measure, Dynamic Lifetime Indicator (DLI), Adaptive Calibration Timer (ACT), Time to Maintenance (TTM)

Housing material: Die cast aluminum

Enclosure: IP66, NEMA 4X

Hazardous area approvals: NEPSI Ex**, ATEX / IECEx Zone1**, cFMus Cl1 Div1*

Ambient temperature range: –20 to 60 °C (–4 to 140 °F)

Display: Backlit LCD, 4 lines

4 to 20 mA with HART®

Supply voltage: 14 to 30 VDC

Current outputs: 2 x 4 to 20 mA (loop powered), galvanically isolated

Digital inputs: 2, galvanically isolated

Digital outputs: 2 x open collectors

Analog inputs: 1 x 4 to 20 mA (for pressure compensation)

Asset management tool compatibility: AMS versions 10 and 11, Simatic PDM version 6

FOUNDATION fieldbus™

Physical interface: According to IEC 61158-2

Profile: FF_H1

ITK version: 6.0.1

Supply voltage: Non hazardous area (Non-IS): 9 to 32 VDC

Linear Barrier: 9 to 24 VDC

FISCO: 9 to 17.5 VDC

Current: 22 mA

* pending, ** pending for FOUNDATION fieldbus™ version

Ordering information

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<tr>
<th>Designation</th>
<th>Order No.</th>
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<tbody>
<tr>
<td>M400/2H, 1-channel multi-parameter</td>
<td>30 025 514</td>
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<td>M400G/2XH, 1-channel multi-parameter</td>
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<td>M400FF, 1-channel multi-parameter</td>
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www.mt.com/m400-2wire