



## MX 16

Controller



### Presentation

The MX 16 is a compact digital or analog controller, one input, low-profile controller that continuously monitors gas detection, like:

- O<sub>2</sub>
- CO<sub>2</sub>
- CH<sub>4</sub>
- H<sub>2</sub>
- GPL

Available in Easy Duo version, a new **controller + detector + cable\*** offer.

This offer applies to versions:

MX 16 + OLCT 10N O<sub>2</sub>

MX 16 + OLCT 10N CO<sub>2</sub>

Simplified configuration (no software)

Available in 4-20mA version.

Easy and also ready to use.

\*Central detector to connecting cable

### Features

- Analog and digital controller
- Low cost and Easy to install
- 1 measurement line / up to 1 detector
- Integrated relays
- RS-485 Signal Output (optional)



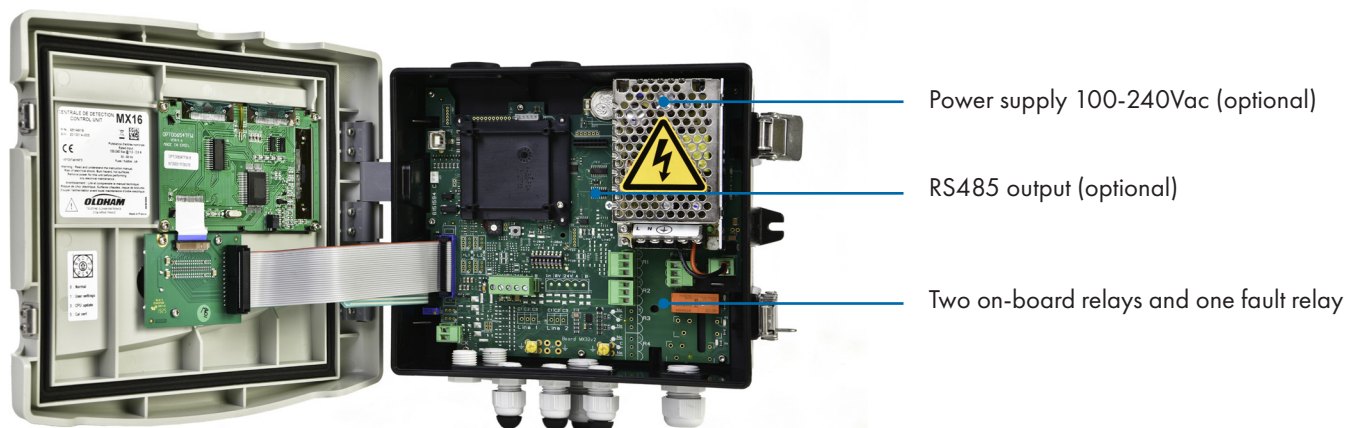
# MX 16

## Controller

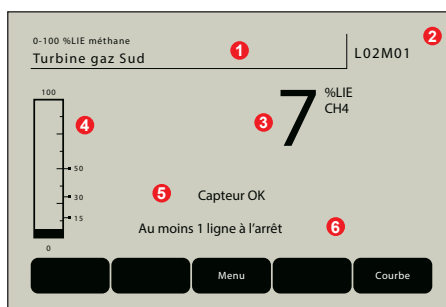
Specially designed for applications in MRI room, laboratory, storage, small boiler room, and breweries or battery charging rooms, the MX 16 measuring unit prevents the risks of explosion linked to the presence of toxic, anoxic and explosive gases in the ambient air. Small size, ease of installation and use are the main strengths of the plant. Used with the OLCT 10N O<sub>2</sub> and CO<sub>2</sub> digital sensor series or any other O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub>, GPL and H<sub>2</sub> analog sensor, the MX 16 guarantees you a solution that complies with French and European standards.



Easy to install: requires a power connection, a cable between the control unit and the detector (supplied with the Easy Duo). It does not require configuration software (factory configured)



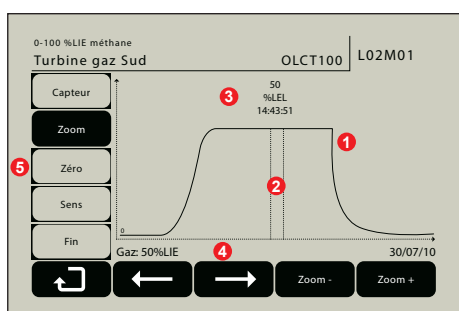
## Normal mode



- 1 Measure Range, gas and detector tag
- 2 Detector address
- 3 Current value with unit and detected gas
- 4 Bar graph with alarm thresholds
- 5 Detector status (OK, OFF, FAULT)
- 6 MX 16 status information

## Calibration curve

Simplified procedure that enables time savings (i.e. non-intrusive and one-man calibration).



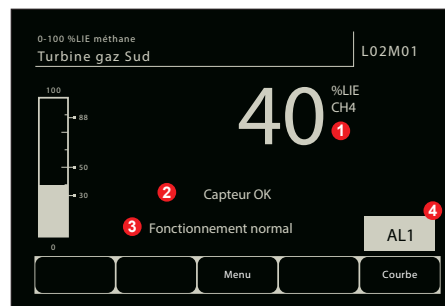
- 1 Calibration curve
- 2 Cursors for span settings
- 3 Measured value
- 4 Calibration gas value
- 5 Detector selection, zeroing and spanning

## Ordering information

REF	Digital version MX 16 Easy Duo
MX16-N-1-0-0-0	Easy Duo* Digital controller MX16 with OLCT10N O <sub>2</sub> (0-30% Vol. - cell 2 years lifespan)
MX16-N-1-1-0-0	Easy Duo* Digital controller MX16 with OLCT10N O <sub>2</sub> (0-30% Vol. - cell 2 years lifespan), with RS485 output
MX16-N-2-0-0-0	Easy Duo* Digital controller MX16 with OLCT10N CO <sub>2</sub> (0-5% Vol.)
MX16-N-2-1-0-0	Easy Duo* Digital controller MX16 with OLCT10N CO <sub>2</sub> (0-5% Vol.), with RS485 output
REF	Analog version MX 16
MX16-A-3-0-0-0	Analogic controller MX 16**, 1 input 4-20mA, O <sub>2</sub> configured (0-30% Vol.)
MX16-A-3-1-0-0	Analogic controller MX 16**, 1 input 4-20mA, O <sub>2</sub> configured (0-30% Vol.), with RS485 output
MX16-A-4-0-0-0	Analogic controller MX 16**, 1 input 4-20mA, CO <sub>2</sub> configured (0-5% Vol.)
MX16-A-4-1-0-0	Analogic controller MX 16**, 1 input 4-20mA, CO <sub>2</sub> configured (0-5% Vol.), with RS485 output
MX16-A-5-0-0-0	Analogic controller MX 16**, 1 input 4-20mA, CH <sub>4</sub> configured (0-100% LIE)
MX16-A-5-1-0-0	Analogic controller MX 16**, 1 input 4-20mA, CH <sub>4</sub> configured (0-100% LIE), with RS485 output
MX16-A-6-0-0-0	Analogic controller MX 16**, 1 input 4-20mA, GPL configured (0-100% LIE)
MX16-A-6-1-0-0	Analogic controller MX 16**, 1 input 4-20mA, GPL configured (0-100% LIE), with output RS485
MX16-A-7-0-0-0	Analogic controller MX 16**, 1 input 4-20mA, H <sub>2</sub> configured (0-100% LIE)
MX16-A-7-1-0-0	Analogic controller MX 16**, 1 input 4-20mA, H <sub>2</sub> configured (0-100% LIE), with output RS485

## Alarm mode

Grayscale mode in alarm conditions for immediate identification of the concerned detector.



- 1 Current value with unit and detected gas
- 2 Detector status (OK, OFF, FAULT)
- 3 MX 16 status information
- 4 Detector in alarm

## Data-logging

By default, the MX 16 can store up to 512 alarm events, 512 fault events and 512 system events.

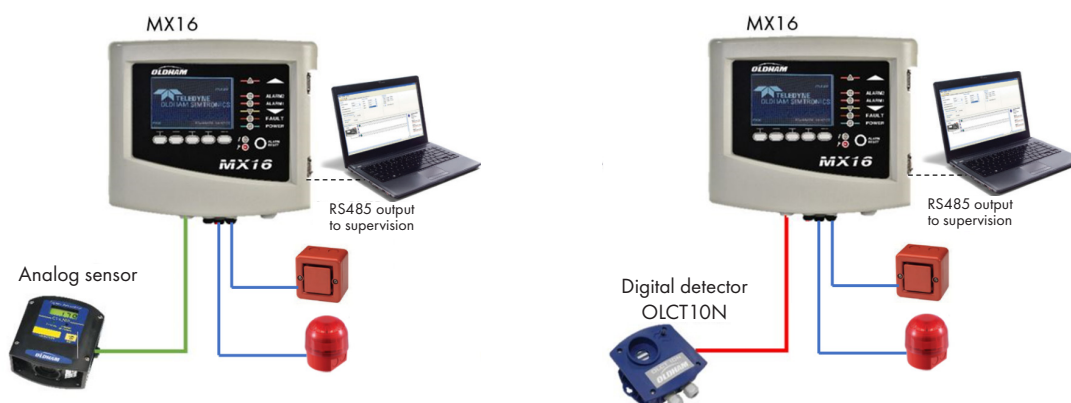
Alarm	Status	Date	Time
Turbine gaz Sud	AL1	ON	13 01 10 18:22:19
Turbine gaz Sud	AL2	ON	13 01 10 18:22:19
Turbine gaz Sud	AL1	OFF	13 01 10 18:22:31
Turbine gaz Sud	AL2	OFF	13 01 10 18:22:31

At the bottom are buttons: 'Page précéd.', 'Page suivante', 'Dernière page', 'Effacer', and 'Echap.'.

## Customization :

- Detector label
- Alarm thresholds
- Password protection
- Digital output
- Display language

## Configuration example



## Technical data

Model	MX 16 gas detection control panel
Dimensions (w*h*d)	265 x 266 x 96 mm (10.4 x 10.5 x 3.8 inches)
Ingress protection	IP55
Cable entries (wall-mounted version)	3 M16 cable glands, 4 to 8 mm <sup>2</sup> 2 M20 cable glands, 6 to 12 mm <sup>2</sup>
Display	LCD back-lit display + smart keys Display in grayscale mode in case of fault Bar graph with alarm threshold
Visual indicators	6 LEDs 5 LEDs for Detector status line 1 common LED for Fault condition 1 common LED for Power condition
Buttons	5 smart keys 1 audible alarm accept/reset button

### Operating use

Operating temperature	-20°C to +50°C (-4°F to +122°F)
Storage temperature	-20°C to +50°C (-4°F to +122°F)
Humidity	5 to 95% RH
Power input	100-240Vca 50-60Hz (35W)
Consumption	250mA max. (without captor)

### Measurement lines

Digital lines	RS-485 communication, proprietary protocol, 9600 Baud 2 twisted shielded-pair cable
Analog channels	1 (4-20mA) 0-23mA analog signal input (4 to 20mA reserved for measurement) 120 Ohm load resistance 2 or 3 core shielded cable depending on detector
Maximum current output per line	0,42A (@ 50°C) to 1A (@ 30°C) with internal AC power

### Alarms

Per channel	4 Alarm levels (AI1, AI2, Overscale, Underscale) + 1 fault Dispute doubt for explosive gases Accessible and modifiable alarm threshold AI1 and AI2, manual acknowledgment
	Configuration of thresholds as standard: <ul style="list-style-type: none"> <li>• O<sub>2</sub> : decreasing threshold</li> <li>• CO<sub>2</sub>/CH<sub>4</sub>/GPL/H<sub>2</sub> : increasing threshold</li> </ul>

### Output

On-board relays	2 alarm relays + 1 fault relay (non-configurable), positiv security Dry contact relay, RCT, 5A / 250Vca – 30Vcc
Digital outputs	RS-485 Modbus RTU

### Approvals

EMC	According to EN 50270:15
Low voltage directive	According to EN 61010-1:10

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