MX 256

Control Unit

Description

The MX 256 has been developed to meet applications that need large capacity, flexibility, quality and ease of use. The MX 256 is a digital control unit for measuring gases present in the atmosphere.

Thanks to its digital technology, the MX 256 allows the connection of up to 256 detectors on all of its 8 channels, leading to a reduction in wiring costs.

Characteristics

- Digital control unit
- 8 measuring channels
- 256 detectors max.
- Very highly flexible
- Very economical with RS485 bus cabling
- Perfect fit for larger public and industrial installations including laboratories

Presentation of the control unit

The MX 256 is a digital control unit intended for the detection and measurement of gases present in the atmosphere and more generally for the processing of any digital signal from digital sensors OLCT 10N types.

Flexible and scalable

The control unit and the different modules are easily programmable thanks to COM256 software.

In a wall mounted box, the MX 256 is compact and easy to install, it can detect explosive and toxic gases.

Thanks to its wired technology, the MX 256 can be adapted to all installations up to:

- 256 addressable relays,
- 224 logic inputs,
- 256 analog outputs,
- 256 digital sensors

Large LCD screen continuously displaying the gas content.
In the event of an alarm, immediate visualization of the area concerned and the gas concentration.

8 channels with 32 modules each: up to 256 slaves per unit.

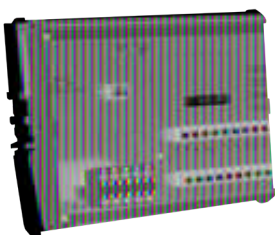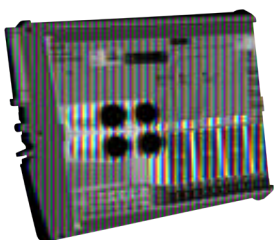3 LEDs to quickly view the status of the installation and alarms.

Relay, analogue output and logic input modules can be connected to the control unit.

The addressable module of 4 or 8 programmable relays can be remotely connected to the control unit to reduce wiring costs.

The addressable logic inputs module can receive all TOR information such as emergency stop, limit switch, fire or intrusion alarm, etc.

The addressable module for analogue outputs (sensor signal copy, min, max, average of a group of detectors) for connection to a recorder, a PLC, a BMS, etc.

Translated with www.DeepL.com/Translator (free version)

Modules 4 or 8 relays	
Size	125 mm x 165 mm x 60 mm
Assembly	DIN rail snap-on
Number of relays	4 relays, 8 relays - Contact type: SPDT
Nominal contact load	2 A - 250Vac or 30Vdc on resistive load
Connection	Screw terminals (cable: 1.5 mm^2 maximum)
Consumption	3.5 mA in normal operation (max: 5.7 mA)

Relay configuration for positive or negative safety by using mini-switches.
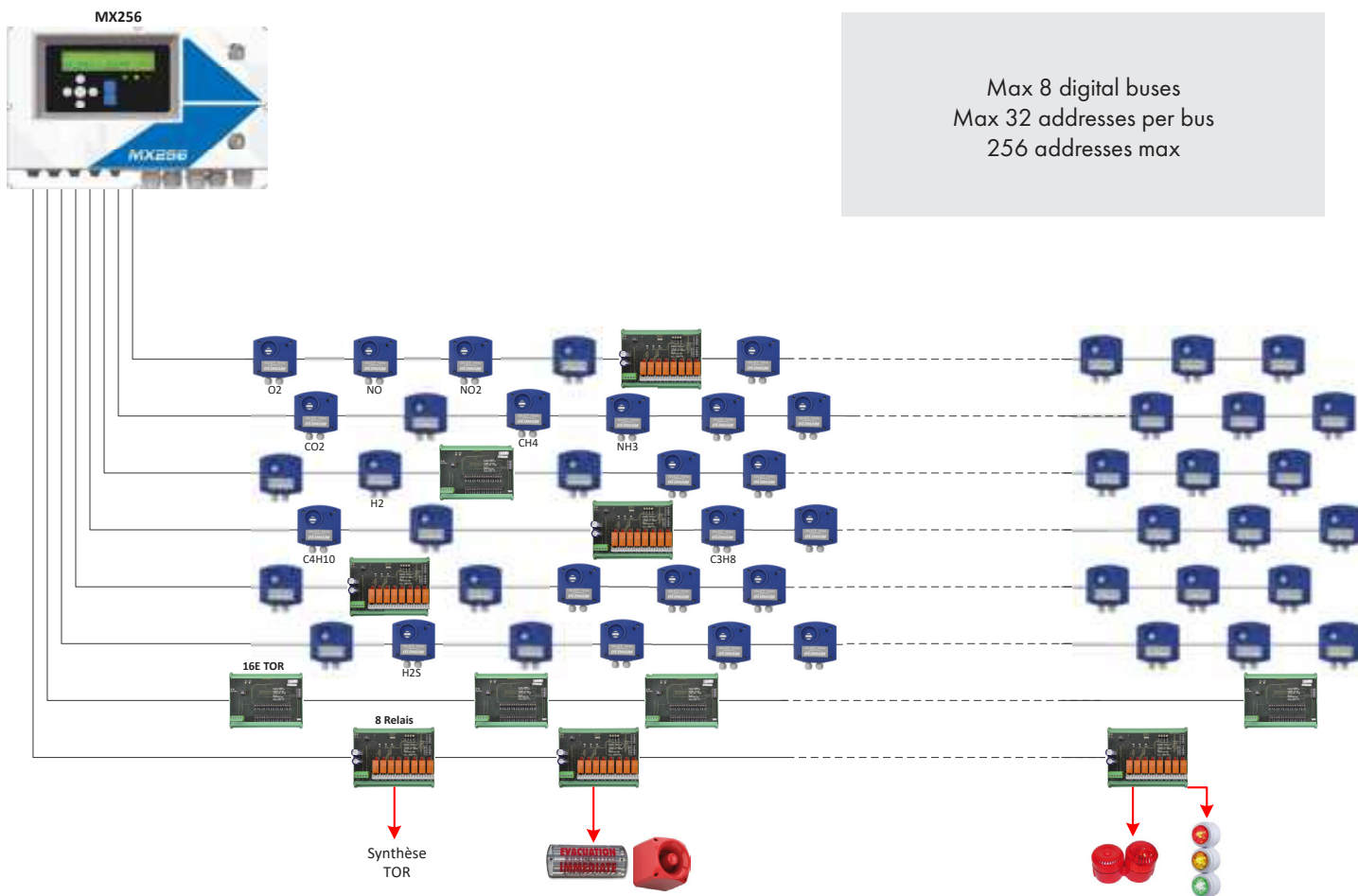2 digital inputs are available on relay modules.

Logic input module	
Size	125 mm x 165 mm x 60 mm
Assembly	DIN rail snap-on
Number of All or Nothing entries	16
Connection	Screw terminals (cable: 1.5 mm^2 maximum)
Consumption	3.2 mA in normal operation (max: 5.5 mA)

Analog output module	
Size	125 mm x 165 mm x 60 mm
Assembly	DIN rail snap-on
Number of analog outputs	4
Connection	Screw terminals (cable: 1.5 mm^2 maximum)
Consumption	130 mA in normal operation (max: 256 mA)

Example of configurations

MX256

Max 8 digital buses
Max 32 addresses per bus
256 addresses max

O2 NO NO2
CO2 CH4 NH3
H2
C4H10 C3H8
16E TOR
H2S
8 Relais

Synthèse
TOR

Compatible detector : OLCT 10N

Standard range and operating temperature	CH_4, C_3H_8, C_4H_{10} H_2	0-100 % LEL (-20°C to + 55°C)
	O_2 (> 2 years)	0-30 % vol (-20°C to + 50°C)
	O_2 (5 years)	0-30 % vol (-40°C to + 50°C)
	CO	0-300 ppm / 0-1000 ppm (-20°C to + 50°C)
	H_2S	0-30 ppm / 0-100 ppm (-20°C to + 50°C)
	NO	0-100 ppm / 0-300 ppm (-20°C to + 50°C)
	NO_2	0-10 ppm / 0-30 ppm (-20°C to + 50°C)
	NH_3	0-100 ppm / 0-1000 ppm (-20°C to + 40°C)
	CO_2	0-5000ppm / 0-5% vol / 0-100% vol (-40 to + 50°C)

MX256 Detection Control Panel	
Wall box: dimensions	320 x 180 x 95 mm
Protection rating	IP 54
Cable inputs/outputs	5 - M20 cable glands - Diameter: 5 to 12 mm for power supply and local relays 9 grommets - diameter 5 to 7 mm

Conditions for use	
Ambient temperature	-10 à +40°C
Storage temperature	-20 à +50°C
Humidity	5% to 95% without condensation
Power supply	Voltage: 85 to 264 Vac - Current: 1.5 A (115 Vac) - 0.8 A (230 Vac)
Internal battery backup	Optional, capacity 600 mA/H

Measurement channels	
Capacity	8 channels with 32 modules
Cable type	2 pairs twisted screened RS485
Module Power Supply	12 to 30 Vdc delivered by the control unit
Module digital network	RS485 Modbus addresses 1 to 32 selectable by mini-switches
Insulation	1500 V between power supply and digital network
Display	Backlit LCD 4 lines of 32 characters - 3 operating status LEDs: OK, Fault, Alarm
Keyboard	7 touch intuitive
Built-in buzzer	Audible signal of alarms and faults

Alarms	
Number of alarms	6 per sensor (Alarms 1 to 4, Out of Range - Fault)
Programmable thresholds	On instantaneous or averaged values, by increasing or decreasing value, manual or automatic resetting
3 internal local relays	R1 (alarm/fault), R2 (alarm), R3 (alarm) Nominal contact load SPDT: 2 A/250 Vac-30 Vdc (resistive load)
Digital Output	RS485 Modbus Protocol (connection with centralized supervision)

Approvals	
Low Voltage Directive	The device complies with the safety requirements of Directive 2014/35/EU , based on standard 61010-1 : 2010 +A1 : 2019
Electromagnetic	EMC According to EN 50270

*Excluding battery, cells and consumables

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