



Designed to meet SIL1 requirements, the new MX 32 gas detection controller is an analog and digital controller that continuously measures and controls gases in the atmosphere. It uses the same platform as the MX 43 which has already proven to be a very high performing and reliable controller.

The new MX 32 manages both digital lines and analog channels and covers all needs for a wide variety of gas monitoring applications. Its digital technology allows up to eight detectors to be distributed on two lines for increased savings. The unit allows two inputs for Wheatstone bridge sensors.

FEATURES & BENEFITS

- One or two channels, up to four or eight detectors
- Manages both digital lines and analog channels and covers all needs for a wide variety of applications
- Manages Wheatstone bridge sensor inputs without the need of additional module
- Five programmable events per detector (one to three alarms, underscale, overscale) and fault event
- Two extra MOSFET outputs for driving the audible and visual alarms
- Front panel LEDs allow for a quick and basic overview of the installation and onboard alarm buzzer
- Easy to read large graphic and multi-language LCD back-lit display
- Up to eight detectors to be distributed on two lines for increased savings
- Smart keys make embedded menus easy to use

APPLICATIONS

- | | |
|---------------------|-------------------------|
| • Boiler room | • Steel mills |
| • Food industry | • Waste water treatment |
| • HVAC | • Petrochemical |
| • Automotive plants | • Laboratories |

APPROVALS

- EMC, according to EN 50270:15
- SIL1 capability according to EN 50271:10 (pending)



Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

For pricing or any further information, please contact Omni Instruments Ltd.

Contact Details:

Mailing Address:



Technical Data

Model	MX 32 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)	5 M16 cable glands, 4 to 8 mm ² (8 to 11 AWG) outer diameter cable 2 M20 cable glands, 6 to 12 mm ² (7 to 9 AWG) outer diameter cable
Display	LCD back-lit display + smart keys Display in grayscale mode in case of fault Customizable by user (display 1 to 8 channels simultaneously, fixed or scrolling, on events...) Bar graph with alarm threshold
Visual indicators	7 LEDs per line 1 LED fault indicator 1 LED fault indicator
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	100-240Vac 50-60Hz (35W) or 22-28Vdc (92W)
Consumption	250mA max. (without module or detector)
Measurement lines	
Digital lines	2 maximum RS-485 communication, proprietary protocol, 9600 Baud 2 twisted shielded-pair cable
Analog channels	2 maximum (4-20mA or Wheatstone Bridge) 0-23mA analog signal input (4 to 20mA reserved for measurement) or OLC 10, OLC 10Twin and OLC 100 flammable gas detectors (Wheatstone bridge type) 120 Ohm load resistance 2 or 3 core shielded cable depending on detector
Maximum current output per line	0,65 to 1A with internal AC power or 1.5A with external DC power
Maximum current output in total	0,65 to 1A with internal AC power or 2x1.5A with external DC power
Alarms	
Per channel	5 Alarm levels (A1, A2, A3, Overscale, Underscale) + 1 Fault Catalytic bead over range protection Programmable thresholds on instantaneous or averaged values, rising or falling alarms, manual or automatic acknowledgement
Output	
On-board relays	4 fully programmable alarm relays + 1 fault relay (non-configurable) Dry contact relay, DPCO relays, contact rating 2A / 250 Vac - 30Vdc
External relays	Up to 16 fully programmable alarm relays Dry contact relay, DPCO relays, contact rating 2A / 250 Vac - 30Vdc
Digital outputs	RS-485 Modbus RTU
Analog outputs	Up to 8 outputs (4-20mA)
Approvals	
EMC	According to EN 50270:15
Low Voltage Directive	According to EN 61010-1:10
SIL1	According to EN 50271:10 (pending)

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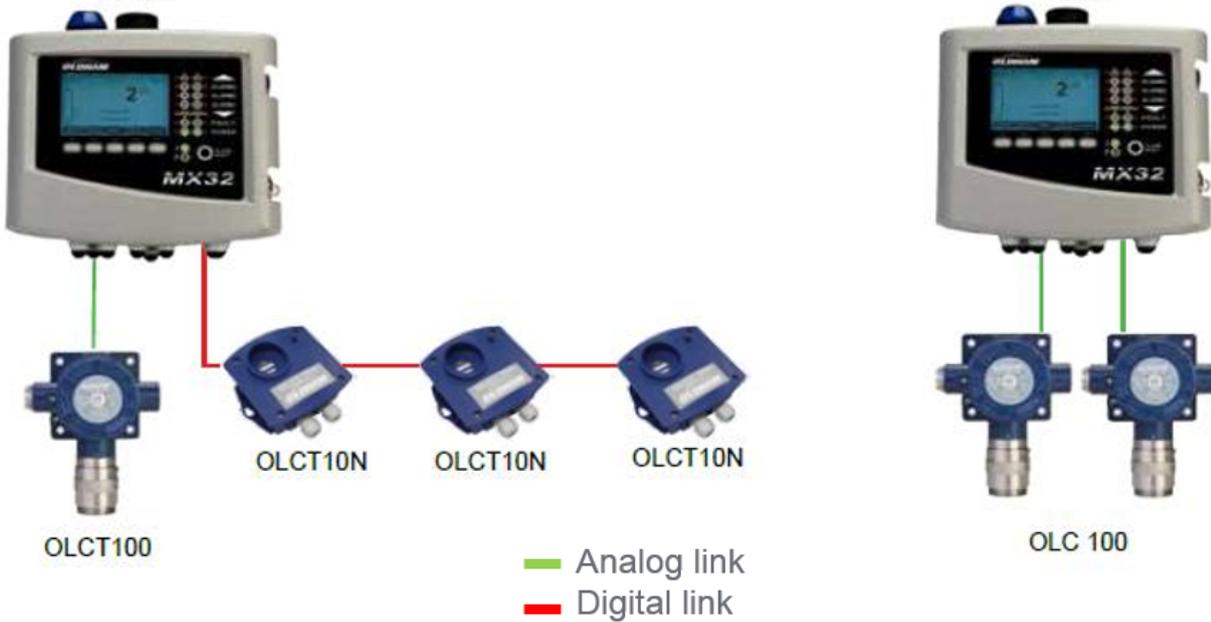
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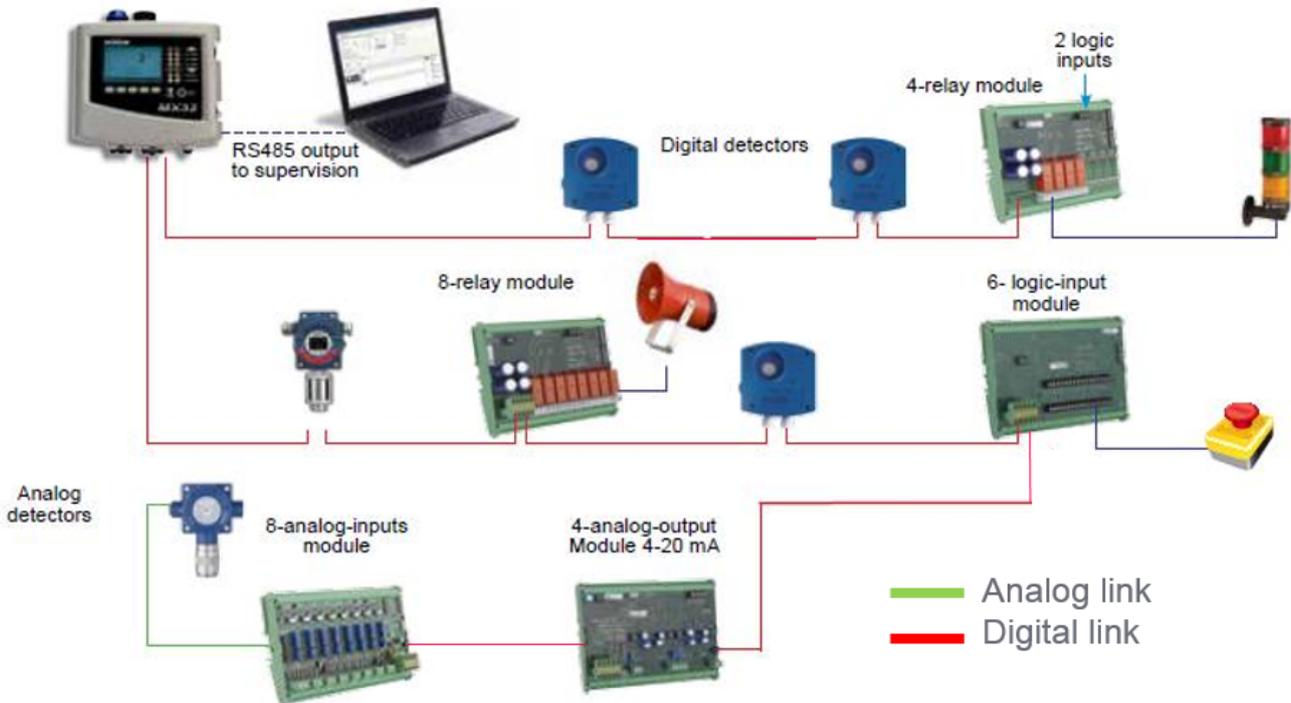
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 Dundee, DD4 7RH, UK



**New MX 32 – 2 lines
Analog**

**New MX 32 – 2 lines
Wheatstone Bridge**



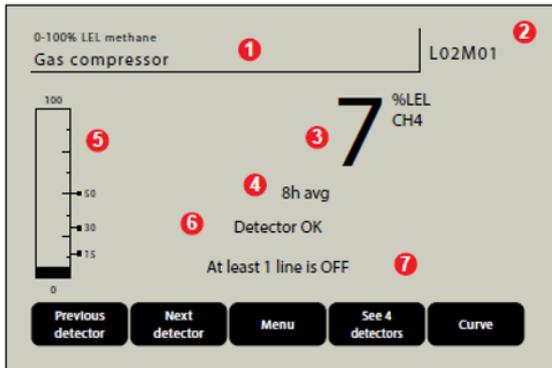
**New MX 32 – 2 lines
Analog**

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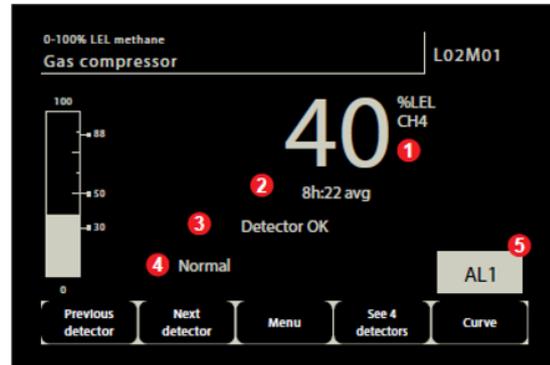
LCD Graphic Display

Normal Mode



- 1 Measurement range, gas and detector tag
- 2 Detector address
- 3 Current value with unit and detected gas
- 4 Averaged value on the last 8 hours
- 5 Bar graph with alarm thresholds
- 6 Detector status (OK, OFF, fault)
- 7 MX 32 status information

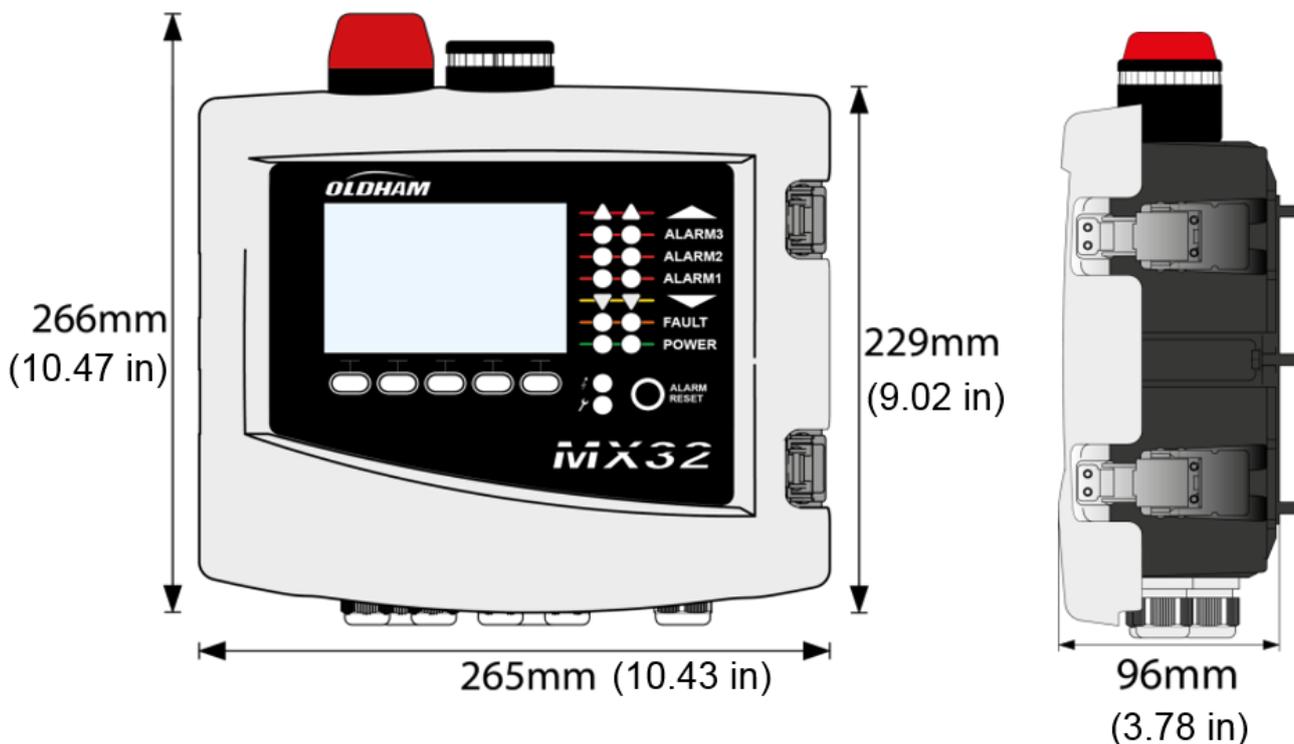
Alarm mode



Reverse video in alarm conditions for immediate identification of the concerned detector.

- 1 Current value with unit and detected gas
- 2 Averaged value on the last 8 hours
- 3 Detector status (OK, OFF, fault)
- 4 MX 32 status information
- 5 Detector in alarm

Dimensions

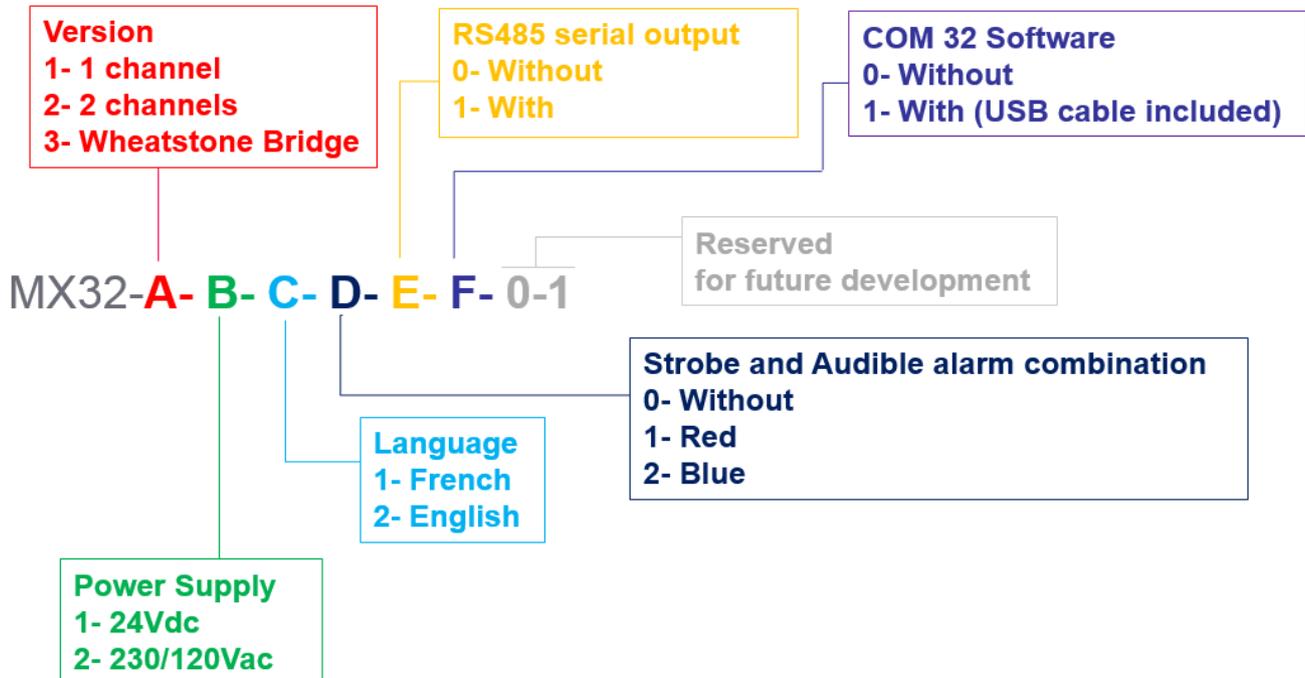


1,8 Kgs / 3.97 Lbs

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Ordering Guide



Future Developments

- Add German, Dutch, Chinese, Russian and more languages
- Add Meridian's RS485 protocol for full compatibility
- Add Wireless Capability
- Get CSA approval for ordinary locations and SIL 1 certification



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