OLDHAM

FIRE AND GAS HAZARDS

MX 52

16 CHANNEL CONTROLLER

- 2 to 16 channels
- 1 fault and 3 alarm indications per channel
- 19” 3U cardframe
- SIL 2 approved according to EN 6511

CERTIFICATIONS

ATEX

The Fixed Gas Detection People

an IST company

www.oldhamgas.com

MX 52 CONTROL UNIT

MX 52 controller accepts inputs from flammable (4-20 mA transmitter or catalytic bridge types) and toxic gas detectors. The MX 52 modular design allows you to build your own gas detection system to meet your requirements.

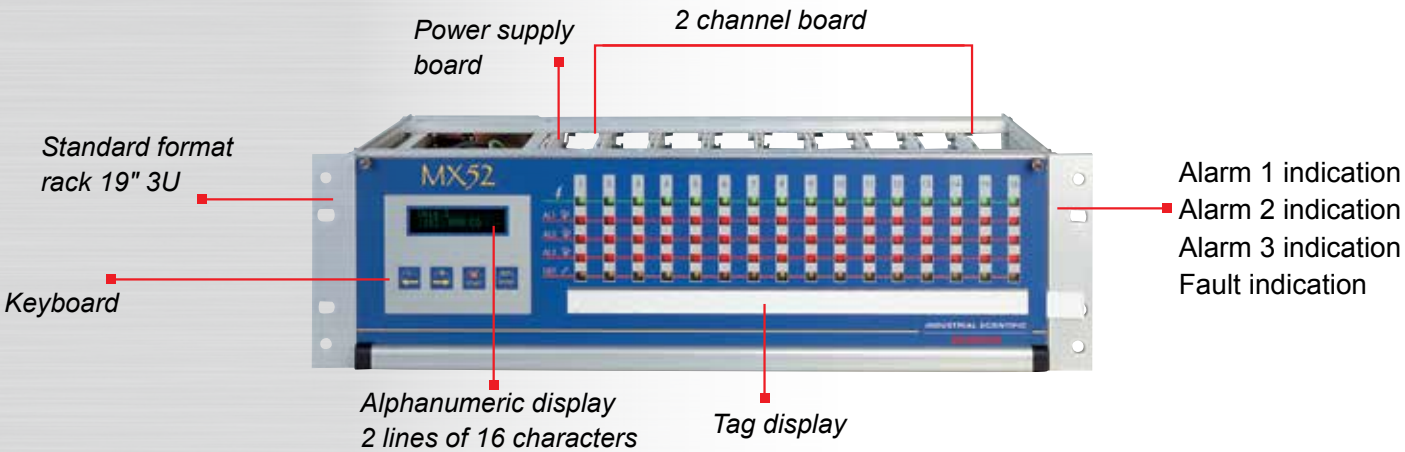
A CONTROL UNIT THAT FULFILLS YOUR NEEDS

The innovative features of the MX 52 are integrated in a 3U 19" frame rack for use in various applications. The MX 52 can be programmed thanks to the keyboard or with a laptop.

Detection display and alarms

Each of the 16 channels performs as follow:

- Continuous monitoring
- Scrolling display of the monitored gas, nature, content and unit (ppm, LEL or %)
- Alarms are triggered if content exceeds preset thresholds
- Relays activated to enable external warning devices (valves, audible/visual alarms…)
- General fault alarms



PERFORMANCE

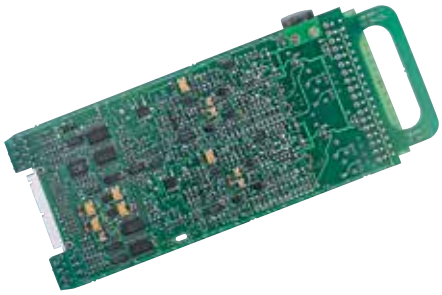
- The main frame is a 19” rack frame 3U high with up to 16 channels (8 cards - 2 channels each)
- Easy wiring
- Easy programming
- Fault and gas alarms monitored by a built in micro-controller
- 8 cards with 2 independent channels each
- Fixed or scrolling fluorescent display with 2 lines, 16 characters
- 3 gas alarm thresholds individually adjustable
- Instantaneous alarms 1 and 2
- Alarm 3 on delay or average
- General fault alarm
- Local TEST push button
- Fail safe relay operation
- Maintenance mode indicated by LED
- 5 LED indicators per channel
- Local or remote alarm acknowledgement
- 4-20 mA input enables the connection of any analog transmitters (flame, temperature, air velocity, pressure…)
- Common digital output (RS485 MODBUS protocol) and 4-20 mA output per channel

RELIABILITY

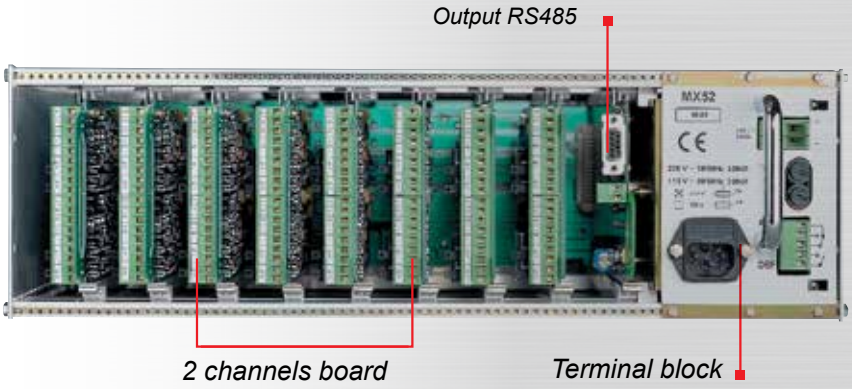
Protection against RF and electromagnetic interferences prevents from false alarms (CE marked)

SAFETY

The MX 52 controller is approved as a SIL 2 Safety Instrumented System according to EN 61511 and is compliant with European standards EN 50054, 50081 and 50082



2 channels board



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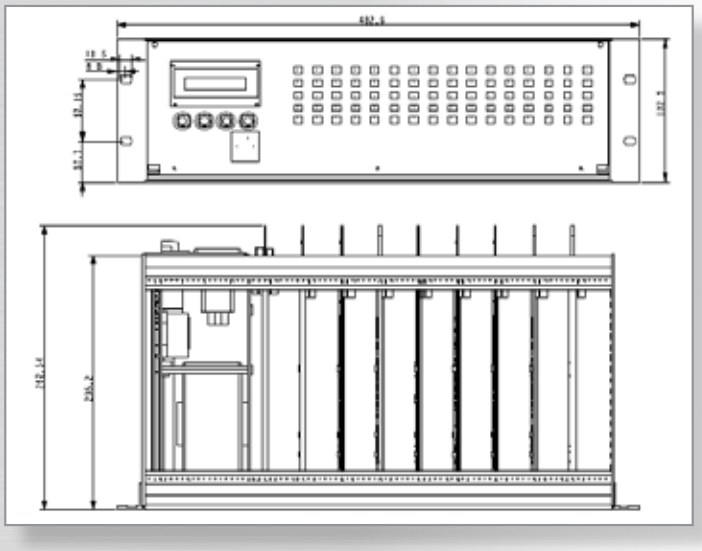
SPECIFICATIONS

MX 52

16 CHANNEL CONTROLLER

MX 52	
Function	Controller Safety Instrumented System
Capacity	8 cards, 2 independent channels each (max 16 channels)
Display	Fluorescent 2 lines 16 fixed or scrolling characters Alarms
Fault alarms	Specific channel identification with yellow LED
	Common fault relay
Gas alarms	3 independent thresholds per channel
	Third threshold on delay or average
	Automatic or manual reset
	Programmable increasing or decreasing alarm
	Visual red LED
Audible alarm	Follows the fault sequence and panel acknowledgement gas alarm
Outputs	2 independent gas alarm relays per channel (2 A - 250 VAC Rating for resistive load)
	1 common alarm 3 relay
	1 common fault relay
	Energized or de-energized alarm relays
	Energized fault relay
	Programmable NC or NO on alarm 1, alarm 2 and fault alarm, SPDT on alarm 3



INPUTS	
Type of detectors	Flammable catalytic bridge type - 3 wires
	Oxygen, toxic or flammable analog transmitters, 2 or 3 wires
	Other 4-20 mA analog output transmitters
Wiring	2 or 3 wires shielded cable
Loop impedance	Flammable 3 wires: 32 Ω
	4-20 mA; 2 or 3 wires: 56 Ω
	Average line length (in meters at 20°C, core size 1,5 mm^2): Flammable: Bridge type - 1000 m 4-20 mA - 2000 m
Signal output	4-20 mA per channel
	• Serial RS 485 or 232 MODBUS protocol
Power supply	103 to 122 V AC or 207 to 244 VA
	21 to 31 V DC
	Power consumption: 300 VA or 240 W
Miscellaneous	Local or remote acknowledgement
	Operating temperature: -10 +45°C
	Relative humidity: 5 to 95 % non condensed
Dimensions	Rack 3U, 19" frame
	Dimensions: 482 w x 132 h x 266 d in mm
Weight	15 Kgs

APPROVALS	
	Compliant with European standards EN 50054, EN 50057, EN 50104 and EN 50271 (harmonized standards 61779-1: 2000 and 61779-4: 2000)
	SIL 2 capability according to EN 61511 (INERIS n° 68210-2005)
	Ex II (2) G
	EEC Directive EN 50081-1-2 and EN 50082-1-2
	Low voltage directive EN 61010-1

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