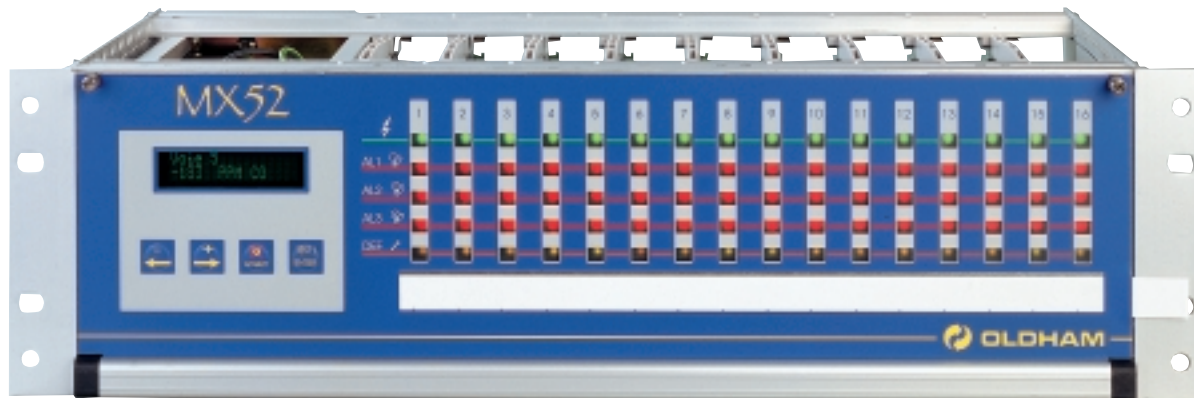


MX 52

16 Channel Controller

- Programmable keyboard
- Modular control panel (3U, 19")
- Master digital display
- Up to 16 channels
- 33 gas alarm thresholds, one with time delay, 1 common fault alarm



The MX 52 control unit allows various detectors to be connected and monitored. Any gas detector from Industrial Scientific or any other 4-20 mA device can be monitored and controlled.

The modular design and flexibility enable the MX 52 to be adapted to your exact requirements.



**INDUSTRIAL
SCIENTIFIC**

www.indsci.com

MX 52

A Control Unit Adapted To Your Needs

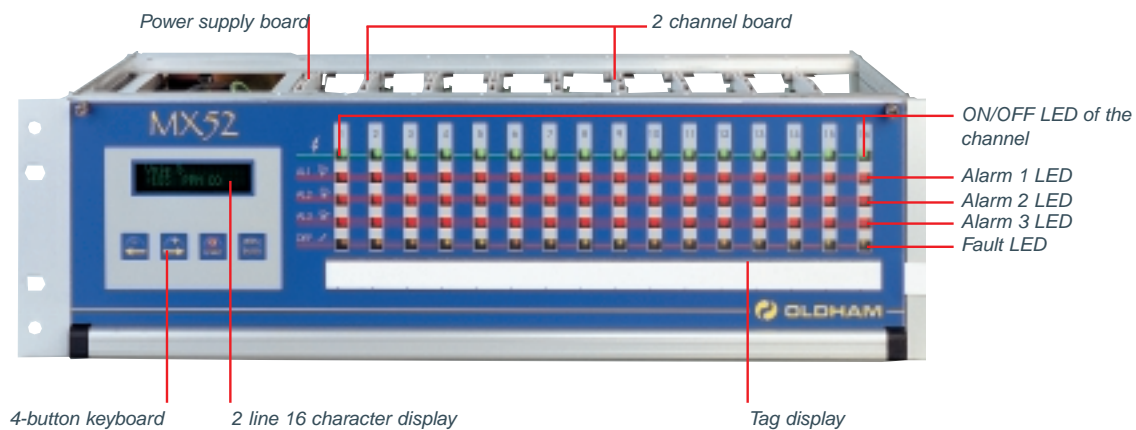
The innovative features of the MX 52 are integrated into a 3U 19" rack frame for use in a variety of applications.

The MX 52 can be programmed either through the keyboard or by an external PC.

Detection, display and alarms

Each of the 16 channels performs the following:

- continuous monitoring of connected detector(s)
- cyclic display of the detected gas, its status, content and unit (ppm, LEL or %)
- alarms are initiated if concentration exceeds preset thresholds
- relays activated to enable external warning devices (valves, audio/visual alarms)
- fault alarms
- 4-20 mA outputs
- serial RS485 Modbus interface



Performance, Reliability, Safety

Performance

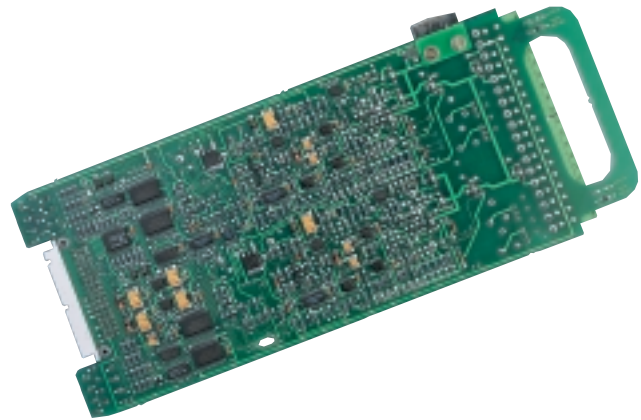
- 19" rack frame 3U high with up to 16 channels (8 cards - 2 channels each)
- Easy wiring and installation
- Simple programming
- Fault and gas alarms monitored by a built in micro-controller
- 8 cards with 2 independent channels each
- Fixed or scrolling fluorescent display with 2 lines, 16 characters
- 3 gas alarm thresholds, individually adjustable
- Instantaneous alarms 1 and 2
- Alarm 3 delayed or averaged
- 5 LED indicators per channel
- Local or remote alarm acknowledgement
- 4-20 mA input with gas detectors, but also with other types of detectors (temperature, air speed, pressure)
- Common serial output with RS485 Modbus protocol
- 4-20 mA output per channel

Reliability

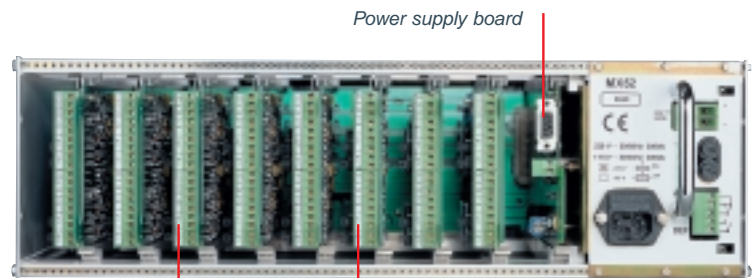
- Protection against radio-frequency and electromagnetic interference prevents false alarms (CE marked)

Safety

- General fault alarm
- Remote audible alarm
- Transmission for each measurement channel, alarms, faults, state of relays on RS232 or 485 output
- Integrated display and LED test
- Fail safe relay operation
- Maintenance bypass mode indicated by LED indicators



2 channel board



Power supply board

Terminal block

2 channel board

Rear view



MX 52

SPECIFICATIONS

Type: Wall mounted controller
Function: Microcontroller-based multichannel monitor
Capacity: 8 cards, 2 independent channels each (max 16 channels)
Display: Fluorescent 2 lines 16 fixed or scrolling characters

Alarms

Fault alarms: System functioning normally
Faulty interface link
Faulty detector
Faulty microcontroller
Specific channel identification with yellow LED
Common fault relay

Gas alarms: 3 independent thresholds per channel
Third threshold delayed or averaged
Automatic or manual reset
Programmable increasing or decreasing alarm
Visual red LED
Relay output per channel (alarm 1 and 2), common relay on alarm 3

Audible alarm: 80 dB at 30cm

Outputs: 2 independent gas alarm relays per channel (2 A - 250 VAC Rating for resistive load)
1 common gas alarm 3 relay or common audible alarm transfer (programmable)
1 common fault relay
Programmable positive or negative safety on alarm relays
Fail safe on fault
Programmable NC or NO output on alarm 1, alarm 2 and fault alarm, SPDT on alarm 3

Inputs

Type of detectors: Flammable detector bridge type
Oxygen, toxic or flammable detector 4-20 mA output, 2 or 3 wire
Other detectors standard current output

Links: 2 or 3 wires re-inforced cable

Loop impedance: Flammable 3 wire : 32 Ω
4-20 mA: 2 or 3 wire - 56 Ω
Average line length (in meters at 20°C for a 1,5 mm² conductor) :
- Flammable : Bridge type - 1000 m 4-20 mA - 2000 m
- Power supply control per LED on each channel (power ON/OFF green LED indicator)

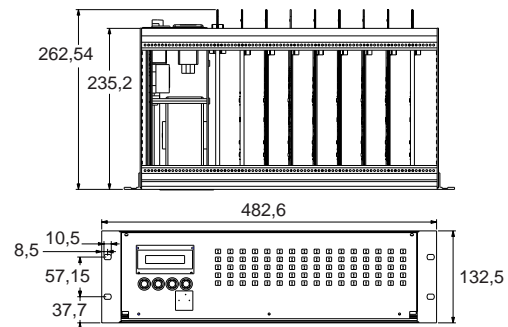
Signal output: Analog 4-20 mA per channel
Serial RS 485 or 232 MODBUS protocol

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
In compliance with European standards 50054, 50081 and 50082

Dimensions: Rack 3U, 19" frame
Dimensions : 482 w x 132 h x 266 d in mm

Weight: 15 Kgs



INDUSTRIAL SCIENTIFIC CORPORATION

CORPORATE HEADQUARTERS

1001 Oakdale Road • Oakdale, PA • 15071-1500 • USA

www.indsci.com



AMERICAS

Tel.: +1-412-788-4353

Fax: +1-412-788-8353

info@indsci.com

ASIA PACIFIC

Tel.: 86-10-8497-3970

Fax: 86-10-8497-3971

sales@isc-cn.com

EUROPE

Tel.: 33-3-21-60-80-80

Fax: 33-3-21-60-80-00

info@groupoldham.com

AUSTRALIA / NZ

Tel.: +61-2-8870-3400

GERMANY

Tel.: +49-231 / 9241-0

MIDDLE EAST

Tel.: +971-50-455-8518

SINGAPORE

Tel.: +65-6561-7377

UNITED KINGDOM

Tel.: +44-0-1782-562002

CZECH REPUBLIC

Tel.: +420-234-622-222/3

ITALY

Tel.: +39-011-3801371

NETHERLANDS

Tel.: +31-76-5427-609

SWITZERLAND

Tel.: +41-26-652-51-18