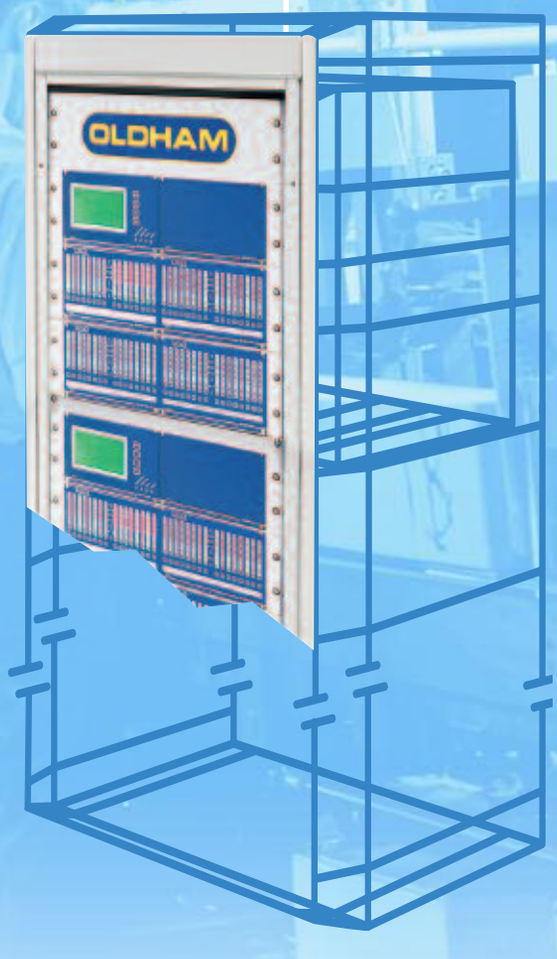
Monitoring system for gas and flame detection

MX 62

- *Back up processor to ensure continual measurements*
  (SIL 3 from EN 50402)
- *64 secure channels*
- *Modularity and flexibility*
- *Reduced installation costs*
- *Direct connections either on network or in loops*



AFAQ ISO 9001 · Ex · ATMOSPHÈRES EXPLOSIVES INERIS EXPLOSIVE ATMOSPHERES · CE ATEX · SAFETY DEVICES SIL INERIS DISPOSITIFS DE SÉCURITÉ

INDUSTRIAL SCIENTIFIC

OLDHAM

Global fire and gas detection solutions

Petrochemical plant, 30 ha

A secure system for gas and flame detection

The MX 62 provides a back up system, to ensure an accurate analysis from the sensors to meet more and more specific requirements. The MX 62 system already meets the requirements of ATEX 100 A and offers the high level of security required by the SIL 3 (EN 50402).

The MX 62 monitor has incorporated these new requirements and other future needs. Through its modularity, flexibility, installation and reduced operational costs, the MX 62 is a very attractive solution.

A secure installation for optimised costs

An entirely secure installation

The structure of the MX 62 system has been developed to provide dual measurement : reliable data is passed quickly from the detectors to the relays.

A structured programming

The ConfigPro.Exe software configures the MX 62 via a PC.
Access to the different functions is protected by several passwords.

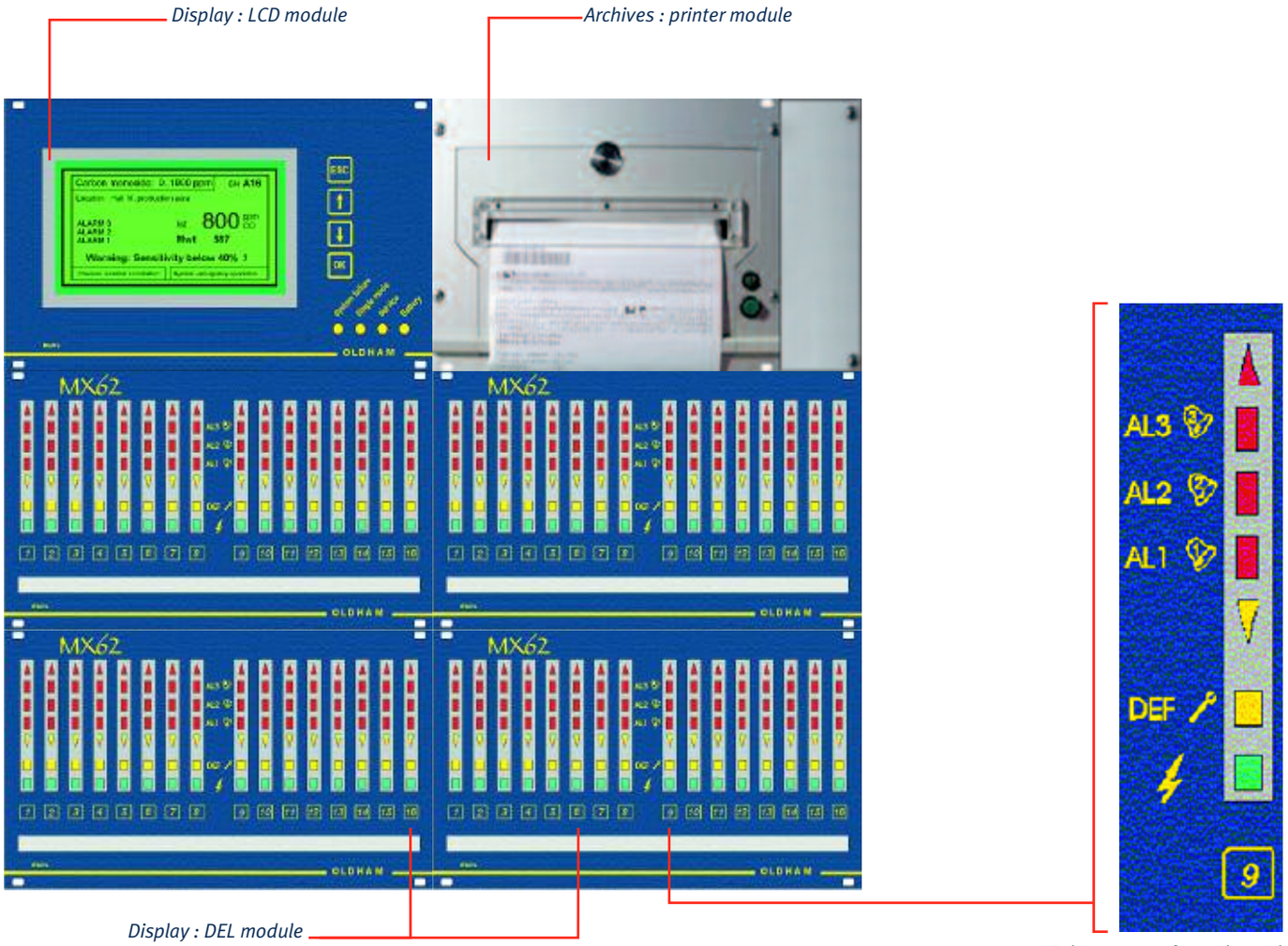
Space saving and easy access to the different element of the MX 62

An optimised cost

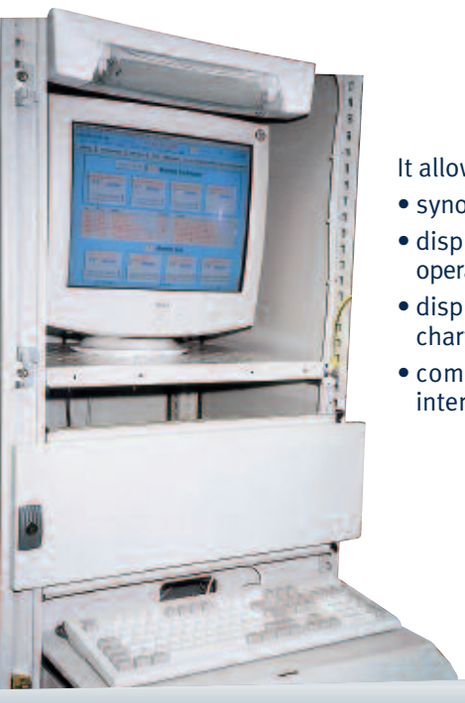
- The performance is innovative and meet the new requirements in terms of security
- The modularity allows a personalised operation and reduces wiring costs
- The flexibility helps integration of your system
- The reliability ensures minimum maintenance
- Programming the outputs considerably reduces the relay requirements.

Example of a 256 sensor installation

Operating panel



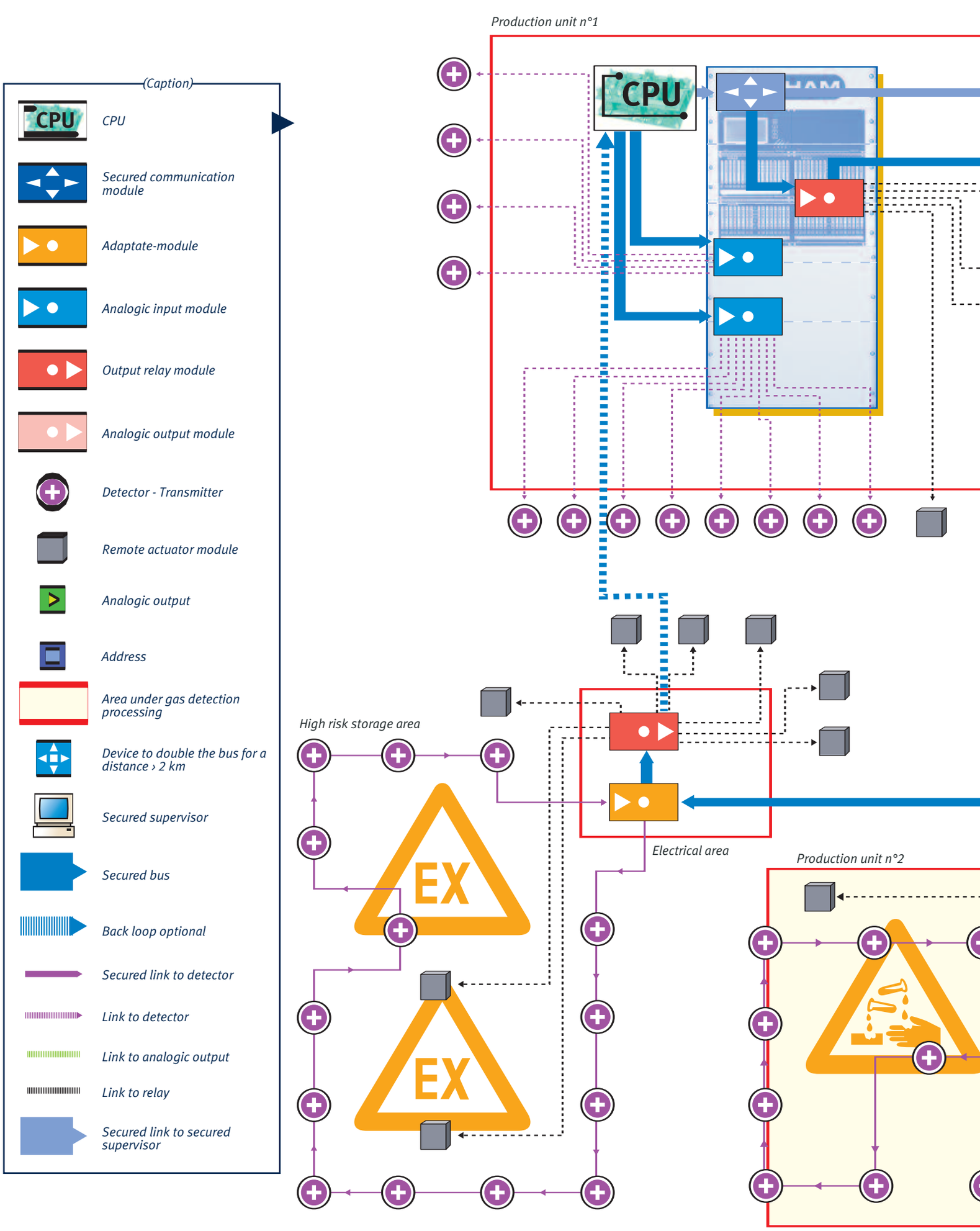
Supervisor



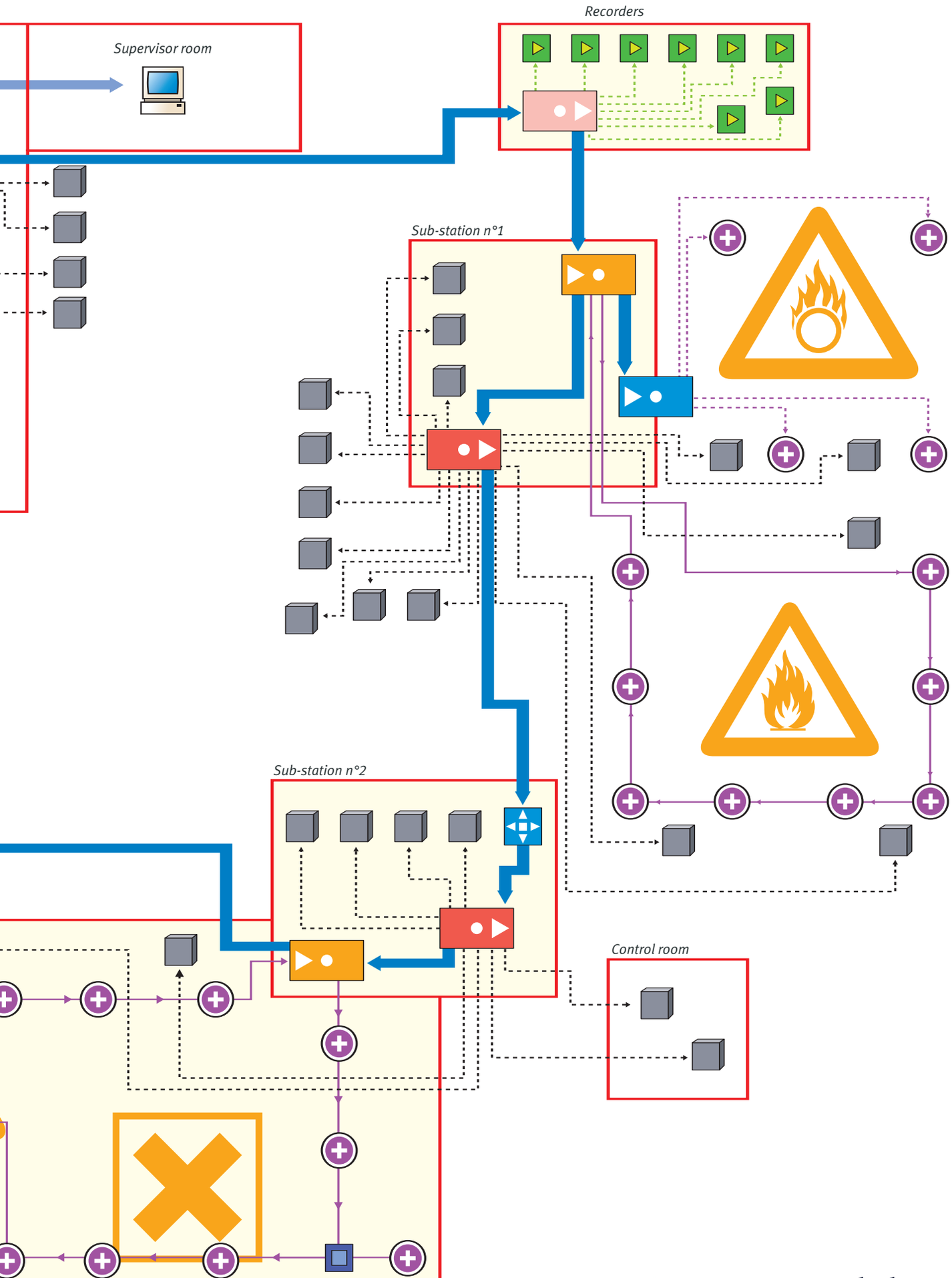
It allows :

- synoptic display
- display of measurements and operating status of the detectors
- display of curves and historic charts with a printout
- communication through the internet

Supervisor


(Caption)
CPU
CPU
Secured communication module
Adaptate-module
Analogic input module
Output relay module
Analogic output module
Detector - Transmitter
Remote actuator module
Analogic output
Address
Area under gas detection processing
Device to double the bus for a distance › 2 km
Secured supervisor
Secured bus
Back loop optional
Secured link to detector
Link to detector
Link to analogic output
Link to relay
Secured link to secured supervisor
Production unit n°1
CPU
High risk storage area
EX
EX
Electrical area
Production unit n°2

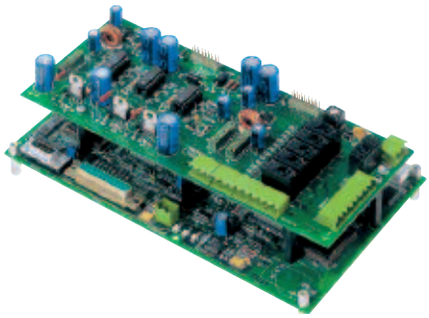
Example of an installation with an MX 62 monitor



Various modules

CPU module

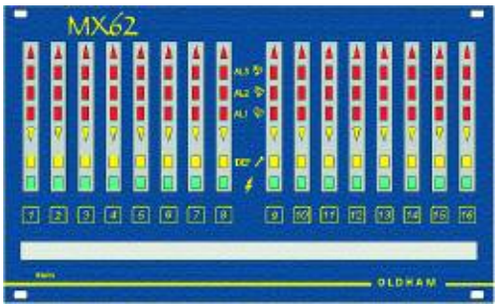
The CPU module is the heart of the system. Its back up power supply and its two processors secure the MX 62 management.
Plug in the DEL and LCD modules, or remote connection with the RS485 connection
(4 wires + screened system).



- Centralised management
- Connection to different modules
- Connection to an internal or external printer
- Dimensions : 240 x 130 x 50 mm (chassis not included)
- Consumption : 12 W
- Nominal tension : 24 VCC
- Minimal tension : 19.2 VCC

DEL module

16 channels available although the electronic equipment is designed for 8 channels as standard.



- 4 alarm thresholds
- Zero checking (reset)
- Power “on”
- Disturbance
- Dimensions : 3U x 1/2 19” x 30mm (chassis not included)
- Consumption : 4W for 8 channels
- Nominal tension : 24 VCC
- Minimal tension : 19.2 VCC

LCD module

- Graphic, alphanumeric, LCD high definition
- User-friendly
- Data storage : at least 5 days or more (option)
- Can be remote via the RS 485 (4 wires + screened system)
- Dimensions : 3U x 1/2 19” x 40 mm (chassis not included)
- Consumption : 8 W
- Nominal tension : 24 VCC
- Minimal tension : 19.2VCC

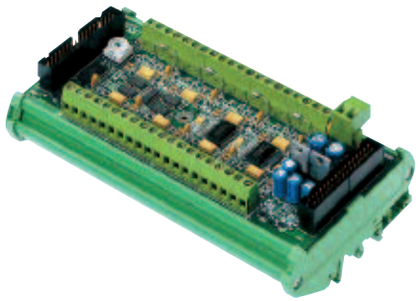
Up to 29 displays can be networked with the MX 62, allowing measurement indication wherever you require them.

Printer module

- Printing of results, relay operating status, fault, min/max average over 8 hours
- Type ASCII, alphanumeric 40 or 80 characters
- Parallel connection
- Dimensions : 34 x 1/2 19” x 75 mm
  thermal paper width : 110 mm
- Consumption : 18 W
- Nominal tension : 24 VCC
- Minimal tension : 21.5 VCC

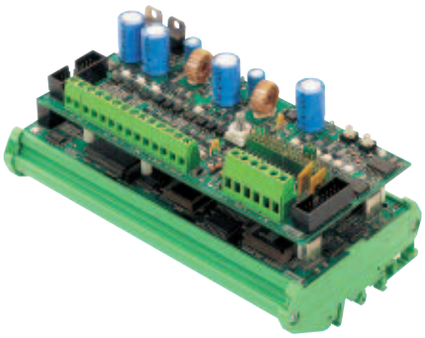
Analogue input module

This module allows the analogue detectors to network; It transmits the information back to the CPU via 2 different analogue/digital convertors.



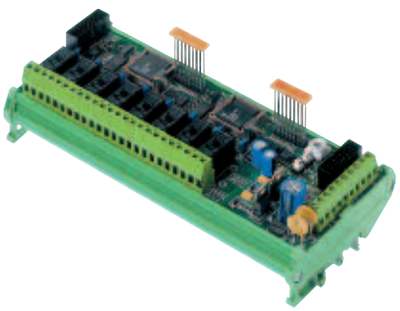
- Direct connection with the MX 62 system or removed via the adapter module
- Up to 8 measurements points
- DIN rail mounted
- Dimensions : 160 x 90 x 70 mm
- Consumption : 1 W

Adapter module



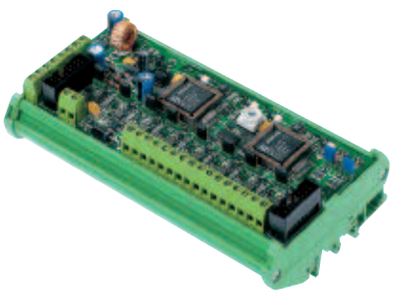
- It allows 3 operating modes :
  - up to 16 addressable detector loop
  - up to 8 addressable detector loop combined with a remote analogue module
  - connection of 2 analogue input modules
  - dimensions : 195 x 90 x 100 mm
  - consumption : 10 W
  - nominal tension : 24 VCC
  - minimal tension : 19.2 VCC
- The module can be remote via 2 networks RS485 (2 x 4wires + screened system)

Relay module



- It is fitted with 2 processors linked with the CPU
  - principal module : 8 relays
  - extension module : 8 relays
  - NO/NC contacts
  - breaking capacity : 460 VA, 60 W
  - positive safety individually programmable
  - principal module dimension : 195 x 90 x 55 mm
  - principal module dimension extended with 16 relays : 195 x 90 x 90 mm
  - maxi consumption : 15 W
  - minimal tension : 20.5 VCC
- The module can be remote via 2 RS485 (2 x 4wires + screened system)

Analogue output module



- It is fitted with 2 processors linked with the CPU
  - fitted with 8 analogue 4-20 mA or 0-10 V outputs
- Each output is programmed to transmit :
  - the growth value for one detector
  - the linearized value
  - means or max for a detectors group
  - dimensions : 160 x 90 x 70 mm
  - consumption : 8 W
  - nominal tension : 24 VCC
  - minimal tension : 19.2 VCC
  - new modules pending (mid 2005) :
    - open collector (56) suitable to drive LED mimic panel as per MX 62 channels
    - communication splitter module providing 3xRS232 ports for remote data exportation

Communication module

- It ensures the link towards a supervisor and a modem.
  - link with CPU via the RS 232
  - personnalised or modbus protocol via RS 422
  - dimensions and consumption : consult us.

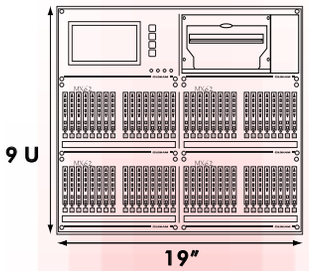
NB : DEL and LCD modules use a common RS 485.
The adapters modules, relays and analogue outputs share two other RS 485.

Technical characteristics

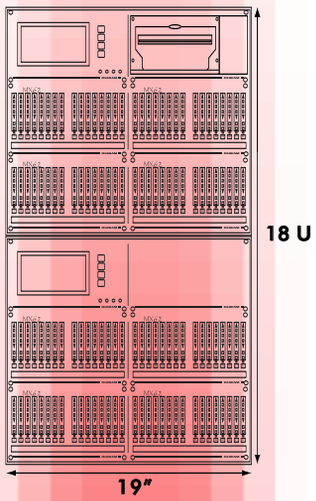
Manufacturer :	• OLDHAM SA
Type :	• Gas and flame monitor
Capacity :	• 64 secure channels per system (128 channels per console)
Casing :	• Electric opening, box and console
Display :	• High definition graphic alphanumeric LCD, remote and optional
Programming :	• Various possibilities : voting, boolean calculations, increasing and decreasing alarms, mean etc.

ALARMS

Visual alarms :	• Gas : 4 thresholds
	• Maintenance : - calibration mode - fault - zero checking
	• Power “on”
Audible alarms :	• Via specialised relays
Inputs :	• 4-20 mA
	• Numeric
Outputs :	• 4-20 mA
	• Numeric
	• Relays (128 max.)
Printer :	• Centronix connection
Power supply :	• 24 V DC , 230 VAC (others on demand)
	• Dual power supply
Operating temperature :	• -15°C to +50°C
Rack dimensions :	• H from 3U x L 19” x P 120 mm
Standards :	• CE, SIL3 of EN 50402 and BSV 03 ATEXG002X
Others :	• Programming software
	• Supervision software



Example with 64 channels



Example with 128 channels

MX 62

2 years Warranty

Your agent or retailer

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