



# Industrial Gas Detection and Alarm Systems

Generating Confidence

maxlogic & mavigard  
fire and gas detection systems

# About Us

Mavili Elektronik A.Ş. operating in the field of fire and gas detection systems since 1987, offers its products and services internationally in compliance with international standards. The company manufactures accredited products approved by authorized institutions, making them available for use in over **70 countries**, including Turkey.

The company, utilizing state-of-the-art technology, produces innovative and user-friendly solutions in the integration of smart building technologies. It is a solution partner for many leading brands in the fields of **CCTV, IP Camera, VMS/PSIM, Access Control and BMS**, establishing itself as a leader in these areas.

Mavili conducts meticulous project planning with **Maxlogic & Mavigard** brand fire alarm systems for various types of areas, ranging from shopping malls to airports, cargo ships to passenger vessels, large hotel chains to complex living spaces, hospitals, universities, and high-risk structures such as industrial facilities.

The company, demonstrating its expertise in both developing products and implementing them in the field concerning standards and regulations, offers a diverse range of products. This range includes software solutions that provide centralized monitoring and control, emphasizing the company's commitment to compliance with standards and regulations throughout the product development and implementation processes.

Mavili combines the expertise of its specialized workforce, industry experience, and a commitment to developing products tailored to customer needs while developing fire and gas detection systems, which are crucial for ensuring life and property safety. The company places great importance on merging knowledge, sector know-how, and understanding customer requirements to create effective solutions for fire and gas safety.

Mavili, its factories located in Ümraniye and Gebze, along with seven regional directorates, aims to be by the customer's side not only during the pre-sales phase but also after the sale. With a workforce exceeding **250 people**, the company continues to serve this industry by maintaining a presence in various regions.



## mavili

## Certificates and Licences

- \* Mavili Elektronik A.Ş.'s **ISO 9001** quality management system, which it implements, has been audited by the world-renowned **LPCB (Loss Prevention Certification Board)** organization and is certified for compliance with **ISO 9001:2015**.
- \* We have undergone an audit for compliance with the **TS EN ISO/IEC 27001:2017** Information Security Management System, conducted by the certification and surveillance services of DataCert Certification Ltd. The audit has confirmed our compliance, and we have been certified with the **TS EN ISO/IEC 27001:2017** certificate.
- \* Our Fire Alarm System products have the **TS EN 54** certification.
- \* Our Fire Detection and Alarm System products have been certified by **LPCB** and **Dedal**, receiving **EN 54** and **CPR** certifications. This approval from international accredited organizations further validates the quality of our products.
- \* Our services are certified with the **TS 12849** Service Place Competency Certificate and the After Sales Services Competency Certificate.
- \* Our Marine type products are certified by **TÜRK LOYDU (SOLAS 74 and FSS)**, and **MED (WHEELMARK)**.
- \* The factory located in Gebze has been entitled to the **Zero Waste Certificate** by establishing a Zero Waste Management System in compliance with the Zero Waste Regulation, which came into effect with the publication in the Official Gazette dated 12/07/2019 and numbered 30829.
- \* Our products have Customs Union Conformity Certificates (**EAC Certificates**) confirming their compliance with approved regulations within the Eurasian Economic Union region.
- \* Certification by **Exveritas** has been obtained, verifying the implementation of quality management systems in the production of explosion-proof products with the **EN ISO/IEC 80079-34** certificate. Additionally, products intended for use in explosive atmospheres have been certified with the **ATEX Type Approval Certificate** for intrinsic safety.
- \* Our products have **USAGE LICENSES** issued by the authorized entities in many countries worldwide.

## Project Areas

More than **100.000** buildings worldwide are protected by **Maxlogic & Mavigard** fire and gas detection systems.



Shopping Malls



Public Buildings



Residences



Car Parks



Industrial Facilities



Airports



Metro and Railway



Hotels



Court House and Prisons



Hospitals



Educational Institutions



Sea Vehicles

and you may contact us for further information

## Safe Choice for Industrial Applications...

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# Industrial Gas Detection and Alarm Systems

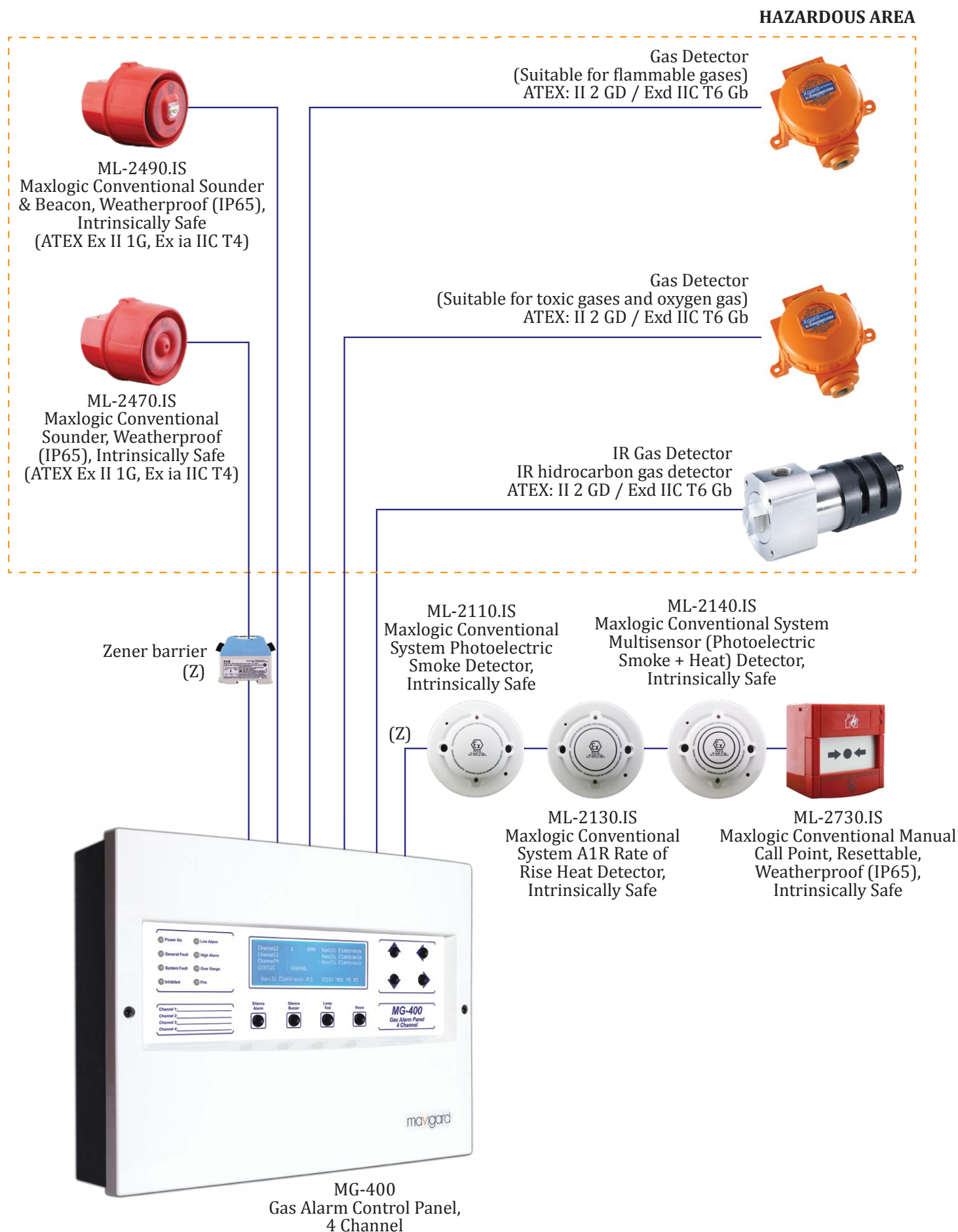
It consists of sensitive gas detection and alarm panels and detectors with superior and stable operating performance, specific to high-hazard locations. It offers many features suitable for use in automation applications with superior operating performance.



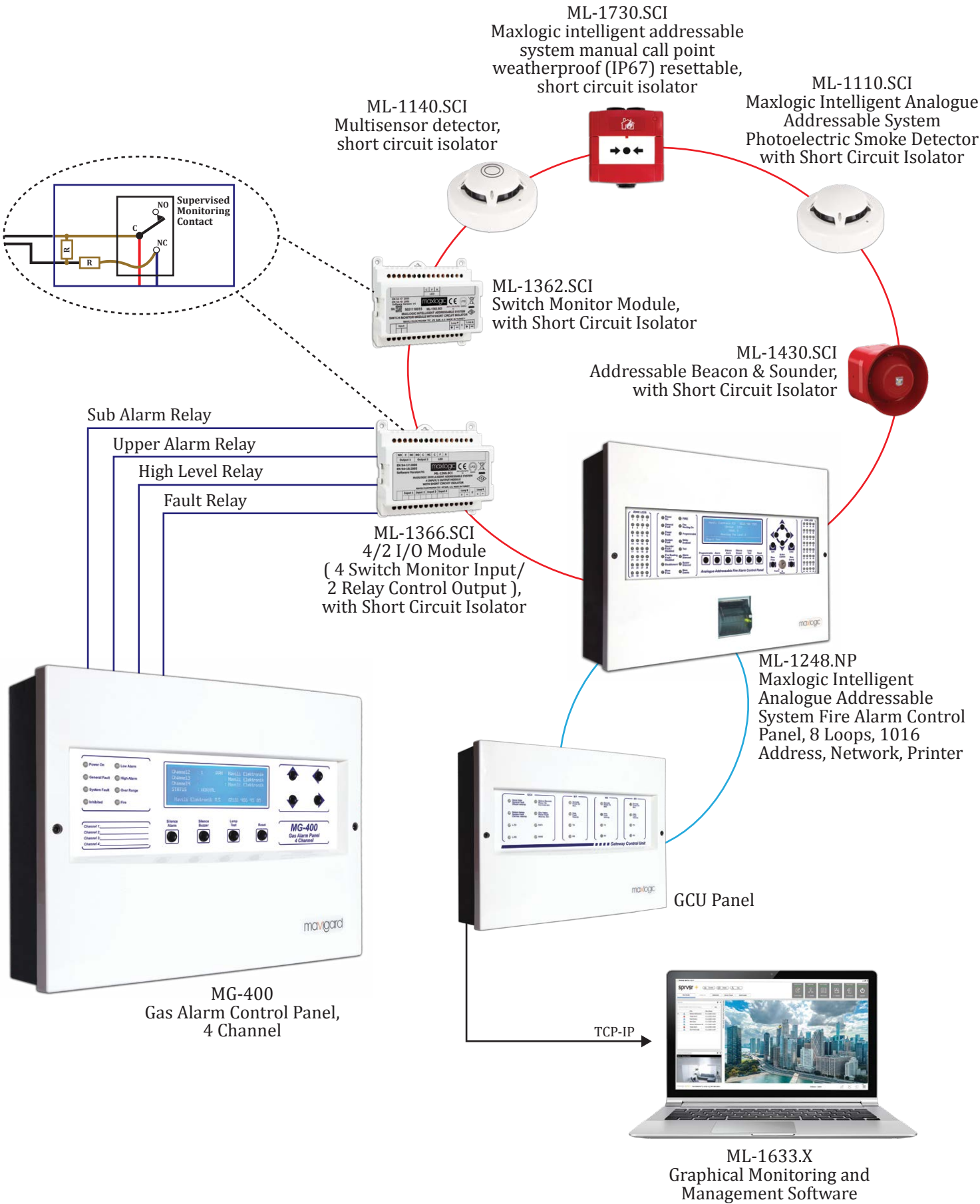
- ▶ 4 channel input
  - ▶ Large graphic 240x64 pixels LCD with adjustable backlight displays system information, including gas detector measurements, alarms and faults
  - ▶ Adjustable high and low alarm thresholds
  - ▶ Sending signals to different systems via high and low alarm relays, high level fault relay, and general fault relay
  - ▶ Suitable for using with Industrial gas, ATEX certified fire detectors and 4-20mA converter card connection.
  - ▶ Location name can be assigned to panel and detectors
  - ▶ Sounder outputs can be work as latching and non-latching
  - ▶ It can work with two and three wired detectors
  - ▶ Channels can be adjust to work as sink or source
- 
- ▶ Blocking desired channels, testing relays and sounder outputs, resetting gas detectors and calibration over the panel can be done.
  - ▶ Access password and remote control to prevent unauthorised people accessing program setting menus.



# Industrial Gas Detection and Alarm Systems Scheme



# Monitoring via Intelligent Adressable Fire Detection and Alarm Systems





# Gas Alarm Panel, 4 Channels

The modern design panel, offering advanced programmability and high performance with its 4 channels, is widely applicable for industrial use. Panels offer many features to integrate to automations applications.



MG-400  
Mavigard Gas Alarm Control Panel,  
4 Channel

- 4 Channel Input
- Gas level, alarm, and fault status for each channel can be monitored through a 240x64 adjustable brightness graphical LCD screen and LED indicators.
- Adjustable high and low alarm thresholds
- Sending signals to different systems via high and low alarm relays, high level fault relay, and general fault relay
- 1 Industrial Gas detectors or conventional detectors up to 20 pcs can be connected to each channel output
- Remote control feature

## MODELS

Product Code	Description
MG-400	Mavigard Gas Alarm Control Panel, 4 Channel



## Safe Choice for Hazardous Environments...



# Intrinsically Safe Conventional Fire Detectors

Specially designed for high-risk areas where ATEX certification is required and precise, stable detection performance is crucial. The ML-21XX.IS series fire detectors, featuring easy installation and user-friendly, ergonomic design, ensure maximum protection.

ML-2110.IS  
Maxlogic Conventional System  
Photoelectric Smoke Detector,  
Intrinsically Safe

ML-2140.IS  
Maxlogic Conventional System  
Multisensor (Photoelectric Smoke +  
Heat) Detector, Intrinsically Safe



ML-2130.IS  
Maxlogic Conventional System  
A1R Rate of Rise Heat Detector,  
Intrinsically Safe



**ML-0140.IS Maxlogic Detector Mounting Base,  
Intrinsically Safe**

Compatible with Maxlogic conventional intrinsically safe fire detectors. The base contact metals are made of stainless steel 301 quality, and these contacts must pass through clips to prevent non-contact.

- ▶ Intrinsically Safe (I.S) for use in hazardous environments, compliant with EN IEC 60079-0:2018, EN 60079-11:2012, and EN ISO/IEC 80079-34:2020 standards
- ▶ Compliant with EN 54-5 and EN 54-7 standards
- ▶ IP 20 protection level
- ▶ Remote Indicator Output
- ▶ 2 red LEDs (Constantly on in the event of an alarm), during normal operation, it flashes once every 8 seconds (for 1ms), and in the case of a fault (contamination or measurement fault), it flashes twice
- ▶ Dual LEDs with a 360° viewing angle,
- ▶ Microprocessor Controlled Design
- ▶ Compatible with ML-0140.IS series detector bases

### MODELS

#### Product Code Description

ML-2110.IS	Maxlogic Conventional System Photoelectric Smoke Detector, Intrinsically Safe
ML-2120.IS	Maxlogic Conventional System A1S Fixed Heat Detector
ML-2130.IS	Maxlogic Conventional System A1R Rate of Rise Heat Detector, Intrinsically Safe
ML-2140.IS	Maxlogic Conventional System Multisensor (Photoelectric Smoke + Heat) Detector, Intrinsically Safe
ML-0140.IS	Maxlogic Detector Mounting Base, Intrinsically Safe





# Safe Choice for Hazardous Environments...

## Intrinsically Safe Conventional Call Points

Specially designed for high-risk areas where ATEX certification is required, with an emphasis on precise and stable detection performance. The ML-27X0.IS series call points, featuring easy installation and user-friendly, ergonomic design, are preferred for their compatibility with all conventional fire alarm systems.



ML-2710.IS  
Maxlogic Conventional  
Manual Call Point,  
Resettable, Intrinsically Safe

ML-2730.IS  
Maxlogic Conventional Manual  
Call Point, Resettable,  
Weatherproof (IP65),  
Intrinsically Safe



- ▶ Compliant with ATEX Directive EN IEC 60079-0:2018, EN 60079-11:2012 and EN ISO/IEC 80079-34:2020 standards
- ▶ Designed in accordance with EN 54-11 standard
- ▶ ML-2710.IS designed according to ATEX Ex II 1G EX ia IIC T4 Ga classification with  $-10^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
- ▶ ML-2730.IS designed according to ATEX Ex II 1G EX ia IIC T4 Ga classification with  $-25^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$
- ▶ ML-2710.IS suitable for use in Category 1, 2 or 3 hazardous atmosphere environments and indoor areas up to  $55^{\circ}\text{C}$
- ▶ ML-2730.IS suitable for use in Category 1, 2 or 3 hazardous atmosphere environments and outdoor areas up to  $70^{\circ}\text{C}$
- ▶ IP65 protection level
- ▶ Ease of returning to the initial position by resetting

MODELS	
Product Code	Description
ML-2710.IS	Maxlogic Conventional Manual Call Point, Resettable, Intrinsically Safe
ML-2730.IS	Maxlogic Conventional Manual Call Point, Resettable, Weatherproof (IP65), Intrinsically Safe



## Safe Choice for Hazardous Environments...

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# Intrinsically Safe, Weatherproof Conventional Sounder / Beacon / Sounder Beacon

Specially designed for high-risk areas where ATEX certification is required, and precise and stable detection performance is crucial. The ML-24X0.IS series sounders/beacons/sounder-beacons are easy to install and use, with an ergonomic design. These products can be used across various systems, from intelligent addressable fire alarm systems to conventional fire alarm systems.



ML-2470.IS  
Maxlogic Conventional Sounder,  
Weatherproof (IP65),  
Intrinsically Safe



ML-2490.IS  
Maxlogic Conventional  
Sounder & Beacon,  
Weatherproof (IP65),  
Intrinsically Safe

- ▶ Compliant with ATEX Directive, EN IEC 60079-0:2018, EN 60079-11:2012 and EN ISO/IEC 80079-34:2020 standards
- ▶ Compliant with EN 54-3 and EN 54-23 standards
- ▶ Designed according to ATEX Ex II 1G EX ia IIC T4 Ga classification, with an operating temperature range of  $-25^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$
- ▶ Suitable for use in hazardous atmospheres of Category 1, 2 or 3 with temperatures up to  $70^{\circ}\text{C}$
- ▶ IP65 protection level
- ▶ Equipped with 32 distinct sound tones. Sound tones and their high/low settings can be adjusted via dip switches
- ▶ Audible, visual or combined fire alarm notifications from control panels

### MODELS

#### Product Code Description

ML-2470.IS	Maxlogic Conventional Sounder, Weatherproof (IP65), Intrinsically Safe
ML-2480.IS	Maxlogic Conventional Beacon, Weatherproof (IP65), Intrinsically Safe
ML-2490.IS	Maxlogic Conventional Sounder & Beacon, Weatherproof (IP65), Intrinsically Safe

# Selected Samples from Our References



[www.mavili.com.tr/en](http://www.mavili.com.tr/en)

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