



Conventional Fire Detection and Alarm Systems

Generating Confidence

maxlogic & mavigard
fire and gas detection systems



Mavili Elektronik A.S 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.

mavili

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.

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

Network Working Ability...

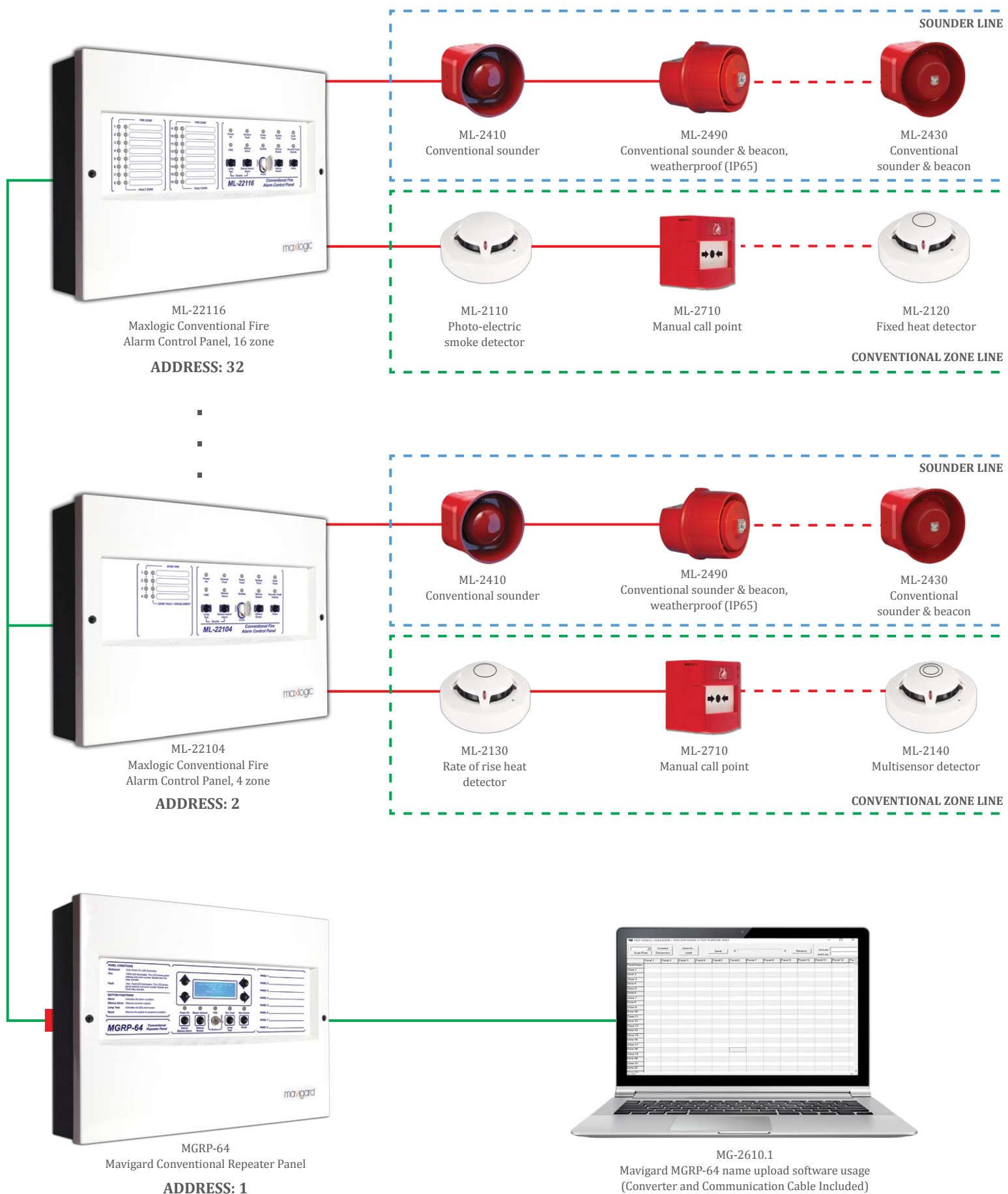
Conventional Fire Detection and Alarm Systems



- Compatible with standard all conventional
- Fire detectors and call points
- Optional zone capacity according to application
- 32 detectors or MCP capacity for each zone
- Supervised zone and sounder lines controlled against short circuit and open circuit
- Superior and stable working performance
- Electromagnetic interference
- Easy use thanks to the few numbers of buttons on the front of the panel
- All LED indicators can be tested with one Button
- Surface mounting technology
- Aesthetic design
- Zone test feature that enables testing of zones with a single person
- Zone disable and sounder disable feature, allowing the desired zones and/or sounder output to be deactivated
- PCB protection against to humidity and corrosion
- Easy installation and use
- Microprocessor Control
- Monitoring fire and fault conditions in zones through zone fire LEDs, zone fault LEDs, and piezoelectric buzzer
- Sounder, fault and fire relay outputs
- Protection against

Conventional System Connection Scheme

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Reliable and Compact Structure...

Conventional Fire Alarm Panels

Conventional system fire alarm panels, economically designed for small and medium-scale applications, feature a modern external appearance and are produced using surface mounting technology.



ML-2228
Maxlogic Conventional Fire Alarm
Control Panel, 8 Zone

- ▶ Compatible with EN 54-2 and EN 54-4
- ▶ 2, 4 and 8 zones
- ▶ 1 sounder output, fire and fault relay outputs
- ▶ Monitoring of fire and fault conditions in zones through zone fire LEDs, zone fault LEDs, and a piezoelectric buzzer
- ▶ Easy use thanks to the few numbers of buttons on the front of the panel
- ▶ Testing of all LEDs with a single button
- ▶ The ability to disable specific zones and/or sounder outputs with the zone bypass and sounder bypass feature.
- ▶ The ease of cable entry from both the front and rear surfaces to the panel.
- ▶ Surface Mounting Technology
- ▶ Aesthetic Design
- ▶ Superior and Stable working performance

Conventional Fire Alarm Panels

Conventional system fire alarm panels, economically designed for small and medium-scale applications, feature a modern external appearance and are produced using surface mounting technology.



ML-22116
Maxlogic Conventional Fire Alarm Control Panel, 16 Zone

- Compatible with EN 54-2 and EN 54-4
- 2, 4, 8 or 16 zones
- Network structure consisting of up to 32 repeater panels and/or fire control panels using a repeater panel
- 230V AC 50 Hz power input
- Ability to assign delay to Zone and Sounders
- Event log memory up to 1000 events
- 2, 4 and 8 zone relay module (Provides Zonal relay output)
- 2, 4 and 8 zone sounder module (Provides Zonal sounder output)
- Panel status can be monitored via PC reset, alarm, alarm silence commands can be sent to panel, zone test and disable features can be performed
- Retrieving event logs stored in memory via the RS-485 port with a computer Program
- 2 sounder output, fire and fault relay

PANEL MODELS	
Product Code	Description
ML-22102	Maxlogic Conventional Fire Alarm Control Panel, 2 Zone
ML-22104	Maxlogic Conventional Fire Alarm Control Panel, 4 Zone
ML-22108	Maxlogic Conventional Fire Alarm Control Panel, 8 Zone
ML-22116	Maxlogic Conventional Fire Alarm Control Panel, 16 Zone
ML-2611	Maxlogic ML-221X Series Programming Software Usage Fee (Including Converter and Communication Cable)

PANEL MODELS	
Product Code	Description
ML-2222	Maxlogic Conventional System Fire Alarm Control Panel, 2 Zone
ML-2224	Maxlogic Conventional System Fire Alarm Control Panel, 4 Zone
ML-2228	Maxlogic Conventional System Fire Alarm Control Panel, 8 Zone

PANEL AND SOFTWARE MODELS	
Product Code	Description
MGRP-64	Navigard Conventional Repeater Panel
MG-2610.1	Navigard MGRP-64 name upload software usage (Converter and Communication Cable Included)

ACCESSORIES AND OPTIONS	
Product Code	Description
MLY-2210	Maxlogic Conventional Fire Alarm Control Panel Relay Module, 8 Outputs
MLY-2211	Maxlogic Conventional Fire Alarm Control Panel Sounder Control Module, 8 Outputs
MLY-2212	Maxlogic Conventional Fire Alarm Control Panel Network Module
MLY-2213	Maxlogic Conventional Fire Alarm Control Panel Memory Module
MLY-2214	Maxlogic Conventional Fire Alarm Control Panel Memory & Network Module

ACCESSORIES AND OPTIONS	
Product Code	Description
MLY-2215	Maxlogic Conventional Fire Alarm Control Panel Relay Module, 4 Zone
MLY-2216	Maxlogic Conventional Fire Alarm Control Panel Sounder Control Module, 4 Zone
MLY-2217	Maxlogic Conventional Fire Alarm Control Panel Relay Module, 2 Zone
MLY-2218	Maxlogic Conventional Fire Alarm Control Panel Sounder Control Module, 2 Zone

New Perspective at Detection Technology...

Conventional Fire Alarm Detectors

The ML-21XX series fire detectors are designed for maximum protection, offering precise and stable detection performance. They feature an easy installation and user-friendly, ergonomic design for optimal functionality.



- ▶ Remote indicator output
- ▶ Compatible with ML-0150 series recessed ceiling mounting back box
- ▶ Compatibility with the ML-0121 series surface mount box in ML series detectors and the MG-3700 series surface mount box in MG series detectors
- ▶ 2 pcs red LEDs (the light flashes continuously in case of fire-situation, the light flashes once per 8 second in case of normal-status, the light flashes twice per 8 second in case of fault-status)

- ▶ Compatible with EN 54-5 and EN 54-7 standards
- ▶ Twin LED indicators for 360° view
- ▶ Microprocessor controlled
- ▶ Compatible with ML-0140 series mounting base
- ▶ Compatible with ML-0141 series mounting base c/w buzzer



ML-0140 Maxlogic Detector Mounting Base for ML series detectors

Compatible with Maxlogic conventional fire detectors. Contact metals of ML-0140 mounting base have 301 quality and stainless type metals. These contacts are with clips in order to prevent intermittent contact.



ML-0141 Maxlogic Mounting Base with Buzzer for ML series detectors

When the detector alarms, at the same time internal buzzer is activated. Compatible with all conventional system detectors. The mounting base c/w Buzzer is powered from detector line.



ML-2110 Photo-Electric Smoke Detector

Photo-electric smoke detector has an infrared photoelectric smoke detection chamber which utilizes the infrared light scatter sensing principle. The detection chamber is protected from dust, insects and other external interferences.



MGR-2100 Mavigard Conventional Optical Smoke Detector with Relay Output

It has a photoelectric smoke chamber that operates on the principle of emitting infrared (IR) light. The photoelectric smoke chamber is designed to be unaffected by external factors such as large particles of dust, flies, and insects.



ML-2120 Conventional Fixed Heat Detector

The working principle of fixed heat detectors is the detection and interpretation of changes in ambient temperature. The detector performs detection with the help of a thermistor when the ambient temperature reaches 60°C.



MGR-2300 Mavigard Conventional Combined Heat Detector with Relay Output

The working principle of combined (temperature rise rate + fixed temperature) heat detectors is the detection and interpretation of changes in ambient temperature. The detector performs detection with the help of a thermistor when there is a temperature change of 30°C in 1 minute in the environment and/or when the ambient temperature reaches 60°C.

ML-2130 Conventional Combined Heat Detector

The working principle of combined (temperature rise rate + fixed temperature) heat detectors is the detection and interpretation of changes in ambient temperature. The detector performs detection with the help of a thermistor when there is a temperature change of 30°C in 1 minute in the environment and/or when the ambient temperature reaches 60°C.

MGR-2400 / MGR-2400.CS Mavigard Conventional Fixed Heat Detector with Relay, 90°C

The working principle of fixed heat detectors is the detection and interpretation of changes in ambient temperature. The detector performs detection with the help of a thermistor when the ambient temperature reaches 90°C.



ML-2140 Conventional Multisensor Detector

Multisensor (optical smoke + heat detector) detectors have an optical smoke chamber that operates on the principle of emitting infrared (IR) light and a temperature-sensitive thermistor. The photoelectric smoke chamber is designed to be unaffected by external factors such as large particles of dust, flies, and insects.



MGR-2500 Mavigard Conventional Multisensor Detector (Optical Smoke + Heat) with Relay Output

Multisensor (optical smoke + heat detector) detectors detect and interpret ambient temperature using a thermistor and monitor the presence of smoke in the environment using an optical cell. If the ambient temperature reaches 60°C and/or smoke is detected inside the optical cell, a fire is detected, and a fire signal is generated.

DETECTOR MODELS

Product Code Description

ML-2110	Maxlogic Conventional System Photoelectric Smoke Detector
ML-2120	Maxlogic Conventional System A1S Fixed Heat Detector
ML-2130	Maxlogic Conventional System A1R Rate of Rise Heat Detector
ML-2130BS	Maxlogic conventional system Class BS Heat Detector
ML-2140	Maxlogic Conventional System Multisensor (Photoelectric Smoke + A1R Heat) Detector
MGR-2100	Mavigard Conventional Photo-Electric Smoke Detector with Relay Output
MGR-2300	Mavigard Conventional Combined Heat (Rate of Rise) Detector with Relay Output
MGR-2400	Mavigard Conventional Fixed Heat Detector with Relay Output
MGR-2400CS	Mavigard Conventional Fixed Heat Detector with Relay Output, 90°C
MGR-2500	Mavigard Conventional Multisensor Detector (Photo-Electric Smoke + Heat) with Relay Output

ACCESSORIES

Product Code Description

ML-0140	Maxlogic Detector Mounting Base
ML-0141	Maxlogic Mounting Base With Buzzer For Maxlogic Detectors
ML-0143	Maxlogic UL Detector Mounting Base (6 inches)
ML-0144	Maxlogic Mounting Base (B class)
ML-0150	Maxlogic Accessories For Fire Detectors Recessed Mounting Base
ML-0121	Maxlogic Surface Mounting Back Box For Fire Detectors
MG-3700	Mavigard Weatherproof Back Box For Fire Detectors

Advance Technology Intelligent Solutions...

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Maxlogic Conventional Aspirating Smoke Detector

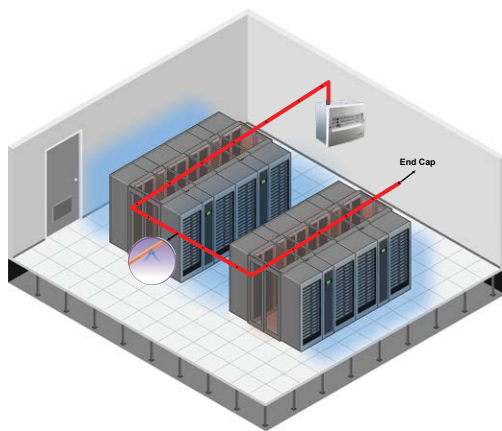
It is designed for the areas where detection of smoke should be extremely sensitive in air ducts. It has suitable options in addressable and conventional systems types according to usage area.



ML-2180
Maxlogic Conventional
Aspirating Smoke Detector

- ▶ Mathematical modelling technology
- ▶ Short circuit isolator option
- ▶ Compatible with EN 54-20 and EN 54-17 standards
- ▶ Ability to work Class A, Class B and Class C sensitivity
- ▶ Wide detection range: 0,005% - 20% (obs/m)
- ▶ High sensitivity resolution: 0.0001% (obs/m)
- ▶ Ability to separate dust and smoke
- ▶ Ability to work Single, U-Type, 2U-Type pipe installation systems
- ▶ Ability to give alarm with 4 Alarm levels: Warning, Pre Alarm, Fire 1 and Fire 2
- ▶ Adjustable fan speeds (1-10 levels)
- ▶ 4 Alarm output relay (100mA @30V), 2 Fault Output relay (100mA @30V)
- ▶ Operating status control via LED indicators
- ▶ Remote control function: Silence, Fault, Reset, Alarm
- ▶ IP30 protection level
- ▶ Programming over USB-PC

Pipe Installation Systems



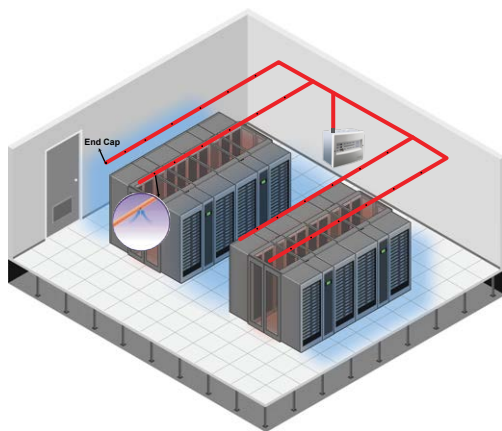
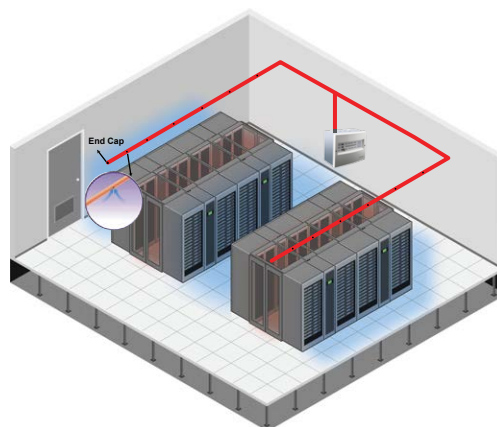
Single Pipe Installation Systems

- Sampling pipe length: < 150m
- Max hole number: 60
- Hole diameter: 2mm
- Ending Cover: Flow can be accelerated with 4-8mm hole.

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U-Type Pipe Installation Systems

- Sampling Pipe Length: < 250m (every each pipe < 125m)
- Max hole number: Total 60 (every each pipe 30)
- Hole diameter: 2mm
- Ending Cover: Flow can be accelerated with 4-8mm hole.



2U-Type Pipe Installation Systems

- Sampling Pipe Length: < 400m (Every each pipe < 100m)
- Max hole number: Total 60 (Every each pipe 15)
- Hole diameter: 2mm
- Ending Cover: Flow can be accelerated with 4-8mm hole.

Usage Areas

- ▶ Aircraft hangar
- ▶ Arsenals
- ▶ IT centers
- ▶ Data banks
- ▶ Valuable document archives
- ▶ Intensive care rooms
- ▶ Laboratories
- ▶ Museum and art galleries
- ▶ Historical houses and historical artifacts
- ▶ Scientific research centers
- ▶ Warehouses
- ▶ Petrochemical facilities
- ▶ Transformer buildings
- ▶ Telecommunication centers and similar structures

MODELS

Product Code Description

ML-2180	Maxlogic Conventional Aspirating Smoke Detector
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ACCESSORIES

Product Code Description

ML-0181	Maxlogic Aspirating Smoke Detectors Heater, 2 Input / 1 Output
ML-0182	Maxlogic Aspirating Smoke Detectors Heater, 4 Input / 1 Output
ML-0183	Maxlogic Aspirating Smoke Detectors Heater, 4 Input / 2 Output
ML-0184	Maxlogic Air Sampling Detector Condensation Trap
ML-0185	Maxlogic Air Sampling Detector Dust Filter
ML-0186	Maxlogic Air Sampling Detector Magnetic Filter



Keep your eyes on the heights...

Beam Type Smoke Detectors

A beam-type smoke detector designed for detecting smoke with infrared beams in large and high spaces such as warehouses and shopping malls. It features a modern appearance and is manufactured using surface mount production technique. The detectors operate based on the decreased amount of infrared light caused by smoke during a fire.



ML-2170
Maxlogic Conventional Beam Type Smoke Detector, Receiver



ML-2170
Maxlogic Conventional Beam Type Smoke Detector, Transmitter

Maxlogic beam type smoke detector consists of 2 parts; receiver and transmitter. They should be installed as facing each other between the distance of 5-100m.



ML-2173
Maxlogic Conventional Reflector Beam Type Smoke Detector



ML-0171
Beam Type Smoke Detector Reflector with 1 reflector



ML-0174
Beam Type Smoke Detector Reflector with 4 reflector

Reflective beam type smoke detector consists 2 parts as a receiver/transmitter unit and reflector. Unit and reflector should be mounted as facing each other, distance is 5-35 meters with 1 reflector and 5-50 meters with using 4 reflectors.

- Both model options with receiver-transmitter and reflector
- 2-digit numeric display for easy commissioning, programming facilitating
- Buttons for easy programming
- With beam type smoke detector 1240 m2, with reflective beam type smoke detector 620 m2 protection area
- LED indicators for power, fire and fault conditions.
- Ability to adjust itself to polluted and dirty environment
- Three sensitivity levels can be easily adjusted
- Continuous control of communication against the faults

MODELS

Product Code Description	
ML-2170	Maxlogic Conventional Beam Type Smoke Dedector
ML-2173	Maxlogic Conventional Reflector Beam Detector
ML-0171	Maxlogic Beam Type Smoke Detector Reflector, 1 Piece Set
ML-0174	Maxlogic Beam Type Smoke Detector Reflector; 4 Piece Set

**Perfect
Compatibility
Between System
and Accessories...**

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Conventional Sounder / Sounder & Beacon, Conventional Sounder / Beacon / Sounder & Beacon, Weatherproof



ML-2410
Maxlogic Konvansiyonel Siren



ML-2430
Maxlogic Konvansiyonel Flaşörlü Siren



ML-2490
Maxlogic Konvansiyonel
Flaşörlü Siren, Hava Şartlarına
Dayanıklı (IP65)

ML-2440
Maxlogic Konvansiyonel Siren,
Hava Şartlarına Dayanıklı
(IP33)

Conventional Sounder

Maxlogic series conventional sounders provide stable performance in indoor applications and are compatible with all conventional panels.

- Compatible with EN 54-3
- Surface mount or flush mount
- Adjustable different 32 voice tone options
- Low or high voice power control
- Microprocessor controlled

Conventional Sounder & Beacon

Maxlogic series conventional sounder beacon generates audible and visual signal, in addition to these features.

- Compatible with EN 54-3 and EN 54-23
- Adjustable different 32 voice tone options
- Adjustable flash frequency and coverage area
- White, strong LED flasher

Conventional Sounder, Beacon, Sounder & Beacon, Weatherproof

Maxlogic series conventional sounders are weather-proof audible warning devices and suitable for outdoor use.

- Compatible with EN 54-3 and EN 54-23
- Adjustable different 32 voice tone options
- IP33 / IP65 high protection class options
- Adjustable flash frequency and coverage area
- Suitable for outdoor use
- White, strong LED flasher

SOUNDER / BEACON / SOUNDER & BEACON MODELS

Product Code Description

ML-2410	Maxlogic Conventional Sounder
ML-2420	Maxlogic Conventional Beacon
ML-2421	Maxlogic Conventional Ceiling Type (C Class, IP33C) Beacon
ML-2422	Maxlogic Conventional Ceiling Type (C Class, IP65) Beacon
ML-2423	Maxlogic Conventional Wall Type (W class, IP33) Beacon
ML-2424	Maxlogic Conventional Wall Type (W class, IP65) Beacon

SOUNDER / BEACON / SOUNDER & BEACON MODELS

Product Code Description

ML-2430	Maxlogic Conventional Sounder & Beacon
ML-2440	Maxlogic Conventional Sounder, Weatherproof (IP33)
ML-2450	Maxlogic Conventional Beacon, Weatherproof (IP33)
ML-2460	Maxlogic Conventional Sounder & Beacon, Weatherproof (IP33)
ML-2470	Maxlogic Conventional sounder, weatherproof (IP65)
ML-2480	Maxlogic Conventional Beacon, Weatherproof (IP65)
ML-2490	Maxlogic Conventional Sounder & Beacon, Weatherproof (IP65)

Sounder Expansion Panel

Compatible with all Intelligent addressable and conventional panels.



ML-0314
Maxlogic Sounder Expansion
Panel, 4 Outputs

- Compatible with EN 54-18 and EN 54-4 standards
- 4 supervised sounder output, each are 1A,24V DC
- Sounder outputs are supervised and continuously monitor for open and short circuit
- Direct connection to addressable and conventional systems
- Continuous control against power supply failure
- Direct supply from the batteries when the power supply is cut
- Battery charge voltage is automatically adjusted according to ambient temperature

PANEL MODELS

Product Code Description

ML-0314 Maxlogic Sounder Expansion Panel, 4 Outputs

Conventional Manual Call Points

Designed according to the EN 54-11 standards, with easy to install and easy to use features and useful accessories, the conventional fire alarm manual call points offer superior and stable working performance.

ML-2710
Maxlogic Conventional
Manual Call Point,
Resettable

ML-2711
Maxlogic Conventional Fire
Alarm Manual Call Point,
Resettable, Led Display



ML-2720
Maxlogic Conventional
Manual Call Point, Resettable,
NC/NO Contact

ML-2730
Maxlogic Conventional Fire Alarm
Manual Call Point, Resettable,
Weatherproof (IP65)

- Easy resettable
- Compatible with EN 54-11 standards
- Surface mount or flush mount
- Compatible with all conventional fire alarm panels
- Optional transparent protection cover
- The LED on ML-2711 fire alarm buttons remains continuously lit in red during an alarm situation.
- ML-2720 fire alarm buttons are compatible with security control panels. They feature NC (Normally Closed) / NO (Normally Open) contact capability.

- ML-2730 fire alarm buttons have IP65 protection class

BUTTON MODELS

Product Code Description

ML-2710	Maxlogic Conventional Manual Call Point, Resettable
ML-2711	Maxlogic Conventional Fire Alarm Manual Call Point, Resettable, Led Display
ML-2720	Maxlogic Conventional Manual Call Point, Resettable, NC/NO Contact
ML-2730	Maxlogic Conventional Fire Alarm Manual Call Point, Resettable, Weatherproof (IP65)
ML-2731	Maxlogic Conventional Fire Alarm Manual Call Point, Resettable, Weatherproof (IP65), NC/NO Contact
ML-2720.SV	Maxlogic Manual Smoke Vent Button
ML-2720.EA	Maxlogic Emergency Activation Button

ACCESSORIES

Product Code Description

ML-0710	Maxlogic Manual Call Point Transparent Protection Cover
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Smoke Detector Tester

Smoke detector tester is a functional testing product for ionization and optical smoke detectors.



SMOKE SABRE 01-001
Smoke Detector Test Spray / Sabre

- UL listed
- Non-flammable
- Non-toxic
- No silicon content, ozone friendly with no CFCs
- Doesn't damage plastic surface and internal structure
- Does not damage the detector
- High speed draft
- Easy to use

ACCESSORIES

Product Code Description

SMOKE	Smoke Detector Test Spray / Sabre
SABRE 01-001	

Ability
to work
in harmony...

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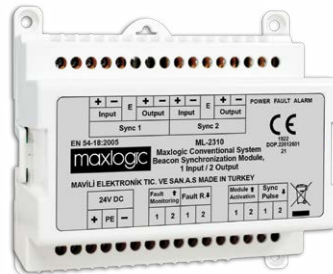
Beacon Synchronization Modules

Maxlogic conventional system beacon synchronization modules are designed to enable the synchronized operation of beacons in a regional manner.



ML-2311
Maxlogic Conventional System Beacon
Synchronization Module, 1 Input/6 Output

ML-2310
Maxlogic Conventional System Beacon
Synchronization Module, 1 Input/2 Output



- Compatible with EN 54-18 standards
- It is designed to work with Maxlogic & Mavigard Conventional Panel, Addressable panel and Gas Panels
- Led's for Power (Green), Alarm (Red) and Fault (Yellow) Conditions
- The ML-2310 model has 1 module activation input and 2 synchronization outputs
- The ML-2311 model has 1 module activation input and 6 synchronization outputs

ACCESSORIES

Product Code Description

ML-2310	Maxlogic Conventional System Beacon Synchronization Module, 1 Input/2 Output
ML-2311	Maxlogic Conventional System Beacon Synchronization Module, 1 Input/6 Output

Intelligent and Strong...

SMPS Power Supply

SMPS power supplies have a stable sensitivity, produced by using surface mount technology and compatible with all Maxlogic & Mavigard series products.



ML-05110
Maxlogic Intelligent SMPS
Power Supply, 10A

- Compatible with EN 54-4
- In the case of electrical failure, power is supplied from battery, which are automatically recharged
- Automatic battery charge circuit
- Battery temperature measurement and automatically arrangement for battery charge voltage
- Earth fault, battery fault (charge fault, low voltage fault, no battery connection fault), power and fuse faults are monitored on the power supply unit
- Dry contact relay output for faults
- Protection feature against short circuits and potential faults in the city grid.

MODELLER

Product Code Description

ML-0515	Maxlogic Intelligent SMPS Power Supply, 5A
ML-05110	Maxlogic Intelligent SMPS Power Supply, 10A

Advanced gas detection and alarm system...

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Conventional Gas Alarm Panel

Consisting of gas alarm panels with high and stable performance, a modern exterior, and surface mount production technology, along with audible/visual alarm gas detectors.



ML-4218
Maxlogic Conventional Gas Alarm Control
Panel, 8 Zone, 16 Relay Output

- ▶ 2x16 character LCD with backlight and LED indicators for faults and system conditions
- ▶ 2-level alarm that gas detectors detect can be shown
- ▶ 2 alarm relays (for alarm level 1 and 2) and 1 fault relay output for controlling other devices and sending signal to other systems
- ▶ 8 zone inputs, with the capability to disable and test individual zones.
- ▶ Relay card with separate relay outputs for each of the 2-level gas alarm signals from gas alarm zones, providing a total of 16 relay outputs for 8 zones.
- ▶ The ability to remotely activate the system into alarm mode, cancel an alarm condition, switch the system to error mode, and remotely reset the system.
- ▶ The option to select the gas alarm in a latching mode.

PANEL MODELS

Product Code Description

ML-4218	Maxlogic Conventional Gas Alarm Control Panel, 8 Zone, 16 Relay Output
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No More Explosion and Poisoning...

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Conventional Gas Detectors

They are gas detectors suitable for use with conventional fire alarm panels, offering superior and stable performance. User-friendly and with high and reliable gas detection capabilities, these detectors are versatile and provide a wide application range.

GDR-1224M
Mavigard GD/GDR Series Gas
Detectors Methane (natural gas)
detector, 12/24V DC with relay



TGDR-1224M
Mavigard Gas Detector for Methane)
detector, 12/24V DC with relay

- Compatible with EN 50194-1 and EN 50291 standards
- Operation control of LEDs and buzzer with test button
- System normal operation condition, faults on detector and gas alarm events can be followed via LEDs
- 5 years sensor life under normal operating conditions
- The ability to connect directly to the zone line
- Models with Relay output
- Built-in buzzer
- 230V AC or 12/24V DC working models

GD2R Series Gas Detectors

Conventional carbon monoxide gas detectors detect gas leaks in enclosed spaces such as homes, garages, and similar areas. Gas detectors using electrochemical sensors provide stable sensitivity and superior performance. These gas detectors have two-level alarm thresholds. When the gas concentration in the environment reaches 50 ppm, it triggers a Level 1 alarm, and when it reaches 200 ppm, it activates a Level 2 alarm. The carbon monoxide gas detectors automatically return to normal operation when the gas level in the environment falls below 50 ppm.

LPG and Natural-Gas Detectors

LPG (buthane + propane) and natural-gas (methane) are hidrocarbon derivative explosive gases. The detectors respond audible and visually, before the leakage reaches %10 LEL (lower explosive limit).

Carbon-Monoxide Detectors

Carbon-monoxide is a toxic gas with explosion risk. The detectors respond audible and visual, when the gas concentration reaches to 50 ppm (parts per million).

TGDR Series Ceiling Type Natural-Gas Detectors

Ceiling type gas detectors have same size and appearance with smoke detectors. Ceiling type gas detectors require MG-3500 mounting base.

Surface Mounting Back Box

Surface mounting back box is compatible with all Maxlogic and Mavigard single field control modules and gas detectors.

CONVENTIONAL GAS DETECTOR MODELS

Product Code	Description
GDR-1224L	Mavigard GD/GDR Series Gas Detectors LPG (buthane+propane) detector, 12/24V DC with relay
GDR-1224M	Mavigard GD/GDR Series Gas Detectors Methane (natural gas) detector, 12/24V DC with relay
GDR-220L	Mavigard GD/GDR Series Gas Detectors LPG (buthane+propane) detector, 220V AC with relay
GDR-220M	Mavigard GD/GDR Series Gas Detectors Methane (natural gas) detector, 220V AC with relay
GD2R-12EC	Mavigard Carbon monoxide gas detector (CO), 12V DC, 2-level alarm output, electrochemical
TGDR-1224M	Mavigard Gas Detector for Methane) detector, 12/24V DC with relay, ceiling type, Requires MG3500 socket
ML-0120	Maxlogic Surface mounting back box (For Gas Detector)

Sensitive detection in explosive environments...

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Gas Alarm Control 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
- 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

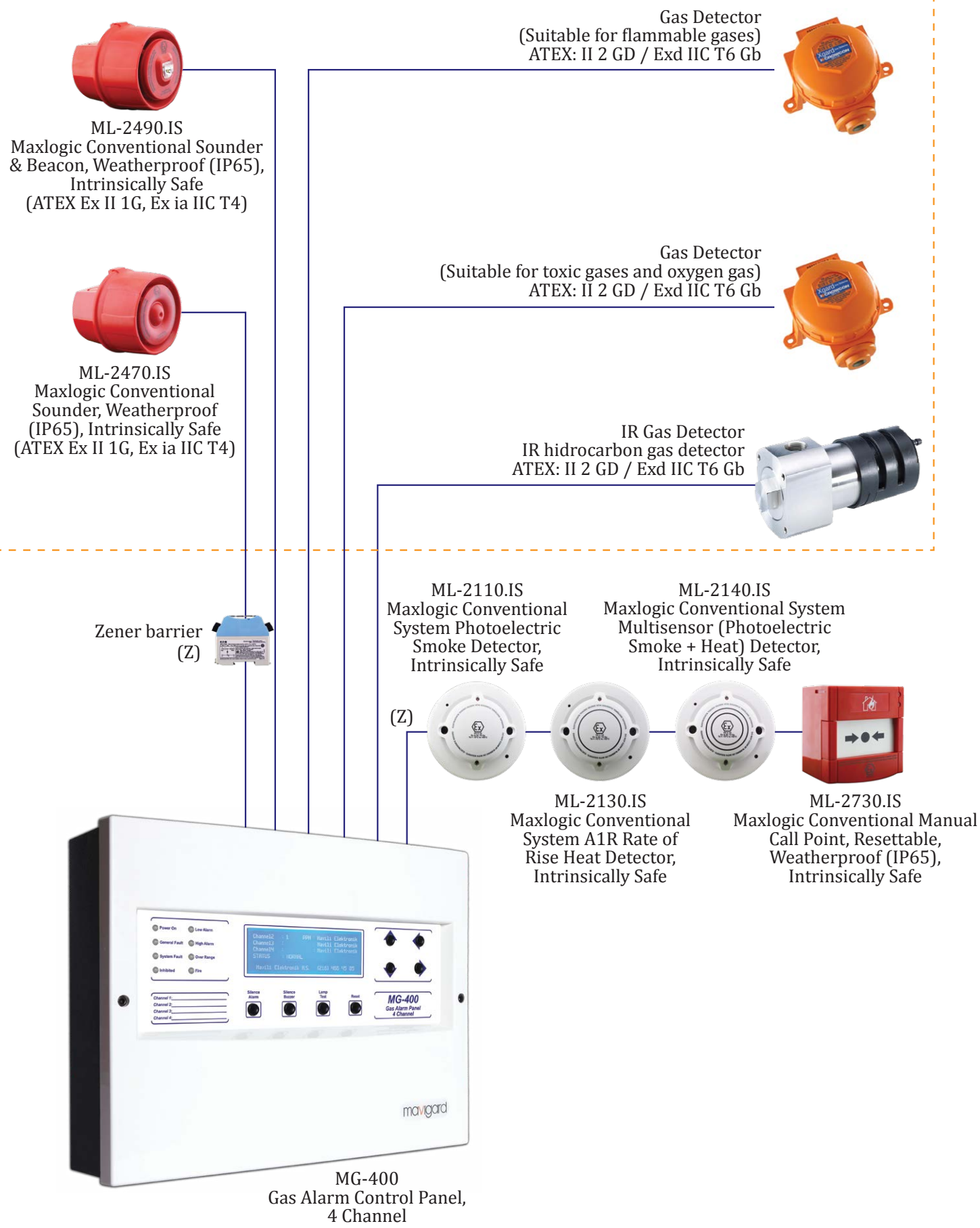
MODELS

Product Code Description

MG-400 Mavigard Gas Alarm Control Panel, 4 Channel

Industrial Gas Detection and Alarm Systems Scheme

HAZARDOUS AREA





Safe Choice for Hazardous Environments...

21

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, 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°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

Safe Choice for Hazardous Environments...

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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°C
- ▶ ML-2730.IS suitable for use in Category 1, 2 or 3 hazardous atmosphere environments and outdoor areas up to 70°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

Selected Samples from Our References



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