

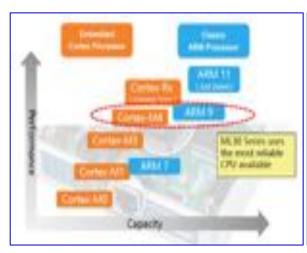




Products collaboration with Honeywell, a well know global leader in the Fire Alarm Community and a Technological Leader with advance products' features demonstrating cutting edge capabilities.

#### **ADVANCE CPU & HARDWARE**

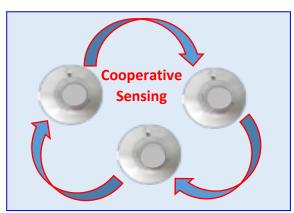
With CPU using ARM 9 Architecture, the ML Series is one of the most technologically advance Fire Alarm System today.

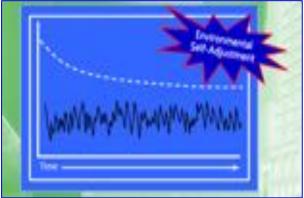




#### **MINIMIZE NUISANCE ALARMS**

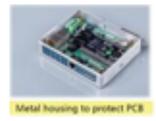
The Cooperative Sensing Technology evaluates sensor reading from three different adjacent sensors to verify uniform smoke spread, a strong indication of a true fire condition. Based on the sensor data, the panel can quickly determine the difference between a real emergency and a nuisance condition. Sensors are equipped with Environmental Self-Adjustment capabilities

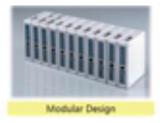




#### **OPTIMIZED INSTALLATION & WIRING**

The construction of the ML Series Intelligent Fire Alarm Panels are configured for ease of Installation and wiring termination / maintenance.









#### SPEED, STABILITY & RELIABILITY....

The ML Series Intelligent Fire Alarm Systems respond rapidly to incipient fire with unmatched precision. At the same time, they significantly reduce the occurrence of nuisance alarms. It's all made possible by its' Advance Detection Technology, which maximises speed, stability and reliability.



# TYPICAL SYSTEM SCHEMATIC (for illustration purposes only) **Panel CAN Network Bus** Isolator Module **Heat Detectors Smoke Detectors Isolator** Loop Module Loop Sounder 24VDC Zone Module Module **Manual Call Points Audio/Visual Alarm Devices CAN Bus** 24VDC **LCD Repeater Panel RS-485** Customised **LED Mimic Panel RS-232 Graphic Monitoring Station**

ML-30 is an intelligent Addressable Fire Alarm Control Panel designed for medium- to large-scale facilities. Fire emergency detection and evacuation are extremely critical to life safety, and the ML30 is ideally suited for these applications. The ML30 is ideal for virtually any application because it features a modular design that is configured per project requirements. With two to sixteen Signalling Line Circuits (SLCs), the ML30 supports up to 3,200 mixed intelligent addressable devices.

Information is critical to fire evacuation personnel, and the ML-30's large colourful 7" Thin Film Transistor (TFT) Liquid Crystal Display (LCD) presents vital information to operators concerning a fire situation, fire progression, and evacuation details. A host of other options are available, including LED, LCD, or PC-based Graphic Annunciators; fire or integration networking; advance detection products for challenging environment, and many additional options.



ML-30 Panel Specifications :-	
Intelligent Signalling Line Circuit (Loop)	2-Loop Expandable to 16-Loop (2-Loop per Loop Card)
Loop Intelligent Devices Capacity	200 Mixed Devices Per Loop
Programmable Software Zones	1,000
Event Log	10,000
Fire Log	2,000
Boolean Logic Equation	1,000
Detector Sensitivity Adjustment	Fire : 1 - 9 Pre-Alarm : 1 - 9
Panel Display	7" Colour LCD Screen, with Large Black LED Backlit Indicator to show System Status
Protocol	Guardian Protocol (CLIP)
Built-in Programmable Relay	Alarm, Trouble, Supervisory
Maximum Repeater LCD Display	64 pcs (Based on CAN Bus) Up to 64km
Standard Panel Network	Up to 64 Nodes

# **Typical Detectors & Manual Call Points**

With a proven and well established protocol that polls every device in sequential order. The ML-30 Panel Loop can each support up to 200 mixed addresses of Detectors and modules.



#### Addressable Optical Smoke Detector ML-902P

Smoke detectors with features that surpass conventional detectors. Detector sensitivity can be programmed in the control panel software. Each detector address provides exact detector location for selective maintenance when chamber contamination reaches an unacceptable level.



#### Addressable Heat Detector ML-905T

The Heat Detectors use an innovative thermistor sensing circuit for Fix-temperature and Rate-of-Rise thermal detection.



#### **Detector Base ML-900B**

The Detector Base fits the ML Range of Detectors, providing ease of termination for field wirings.



# **Loop Power Sounder Detector Base B900BH-3**

The Sounder Base fits the ML Range of Detectors, providing ease of termination for field wirings, and also include the feature of a Sounder (Loop Powered).



## Sounder Detector Base B900BH

The Detector Base fits the ML Range of Detectors, providing ease of termination for field wirings, and also include the feature of a Sounder (External 24VDC Powered)



## Addressable Manual Call Point ML-MCP9

The Manual Call Point allows users to activate the Fire Alarm manually during an emergency. With its' resettable 'Break-glass' feature, it can be reset without the need to replace the glass.

# **Typical Modules & Portable Programmer**

Various models of Modules to suit various applications are available.



#### Addressable Control Module ML-COM9

The Addressable Control Module provides a supervised output to control any auxiliary equipment that needs to interface with the ML-30 Fire Alarm Panel.



#### Addressable Monitor Module ML-MOM9

The Addressable Monitor Module provides an Input for monitoring the status of any auxiliary equipment that needs to interface with the ML-30 Fire Alarm Panel.



## Addressable Zone Module ML-ZOM9

The Addressable Zone Module provide an interface with conventional devices, eg. Smoke/Heat Detectors and Sprinkler Flow Switches. When any of the connected devices are in alarm status, the Module will transmit the alarm signal to the Fire Alarm Panel.



# Addressable I/O Module ML-IOM9

The Addressable I/O Module provides one output and one input in the same module. Ideally used to control an auxiliary equipment, and the same time monitor the status feedback.



#### **Isolator Module ML-ISM9**

In the event of a loop wiring short circuit, the Isolator Module on either side of the loop will detect the fault and automatically isolate the faulty portion, enabling the devices on the unaffected portion of the loop to function normally. The Module will automatically re-instate the affected portion of the loop once the fault is cleared.



#### **Portable Programmer CP900**

The Portable Programmer provides a convenient method for the 'Setting' or 'Reading' of the Field Devices Addresses. It consist of a Keypad and a 4 bit Digital LCD Display to show the Device address that is plug-on.

# **Other Devices & Graphic Workstation**

Various other optional devices to suit different applications are available.



## **LCD Repeater Panel ML-LCD 200**

The LCD Repeater Panel provides remote status indication of the Fire Alarm System.

Suitable to be installed at strategic location on each floor, providing real-time Fire Alarm information.



## Weatherproof Housing for Call Point MCP-WP01

When Manual Call Point is to be installed Outdoor, the Weatherproof Housing provides the ideal IP66 protection against rain and hash environment.



Graphic Workstation is the human-machine interface which carries out monitoring and control on the entire System Network. It provides various Fire Alarm Systems with unified Graphics User Interface which ensure a user-friendly and efficient control of the Fire Alarm System.

The Graphic Workstation is an ideal component of a Fire Command Centre for real-time Fire System Status, and System Control options.



# **Mimic LED Panel (Customized)**

Mimic Panel with LED indications enables users to Easily identify the location of the Alarm during emergencies.

These Panels are customized based on each project layout plan and requirements.



### **Audio & Visual Alarm Devices**

A comprehensive range of Audio & Visual Alarm devices are available to suit various applications.



