Shaping The Future of Life-Safety

# Panels, Detectors & Ancillaries





# A New Way To Manage Your Safety and Your Future



# About SIMPLEX

Founded in 1894, SIMPLEX is the world's premier manufacturer of fire and security products with more than 10 decades of history. During January 2001, it was merged with Tyco to become a member of Tyco International Services GmbH.

In September 2016 Tyco and Johnson Controls merged to become a global leader in Building Products, Technologies & Integrated Solutions and Energy Storage.

As a core brand of Johnson Controls, SIMPLEX has achieved their goal in helping countries throughout Asia, the Americas, Europe and many other regions with their fire safety and fire systems.

Thousands of our engineers provide system planning and secondary design, on-site installation instruction, system debug and other pre-sales and after-sales services for different buildings and various application requirements in more than 90 countries, in order to meet all of the customers' needs.

While delivering state-of-the-art Life Safety Solutions, we always keep our sights set on providing easy migration paths to future technologies. We develop our products to be backward/forward compatible, helping to ensure a long life for our solutions and products, providing on-going operational efficiency and investment protection for our customers.

Everything we do revolves around an approach to life safety that aligns today's thinking with the forethought and flexibility needed for the future.

The new SIMPLEX 4100ESi (eServices) Fire Alarm System utilising new technology to help deliver higher levels of serviceability, manageability and value over the life-cycle of your investment.

# Key Features

- Advanced, easy to read 21cm colour touch screen with interactive mesages AS4428.3:2010 compliant
- Onboard help screens for easy servicing
- Compact flash storage for software, site details, manuals, etc.
- Universal Platform Small to large systems
- New processor with on-board IP Network Capability
- Future-Proof Modular Design
- Backward compatibility and upgrade path to new technologies to protect customer's investment

- Walk Test
- Fast, networkable Smoke Management and Control
- ActivFire Listed afp-3027
- High Level Networking, Multiple Topologies and Connectivity Options
- Third Party Open Protocol Interfaces such as BACnet, Modbus, VESDANet, and OPC Server
- Graphic Command Centres with client/server and dual redundant configurations.
- SafeLINC Fire Panel Internet Interface

# Master Bay

- 10A Power Supply (APS)
- Optional 10,000 point & 1,000 zone NDU, optional T-Gen2 EWS

# **Expansion Bays**

- Relay Cards, conventional Zone Cards for retrofits, addressable MX Technology, or legacy IDNet/MAPNET loop cards
- BMS HLI, Modbus 2-way communication to VESDA and QE90 HLI
- Internet connectivity
- Life-Cycle investment protection
- Migration Path to tomorrow's technology
- Large touch screen



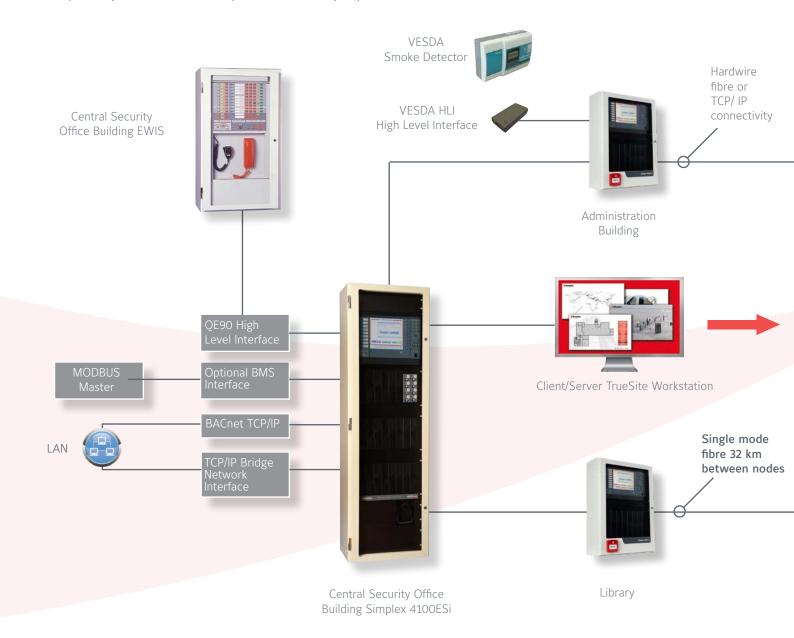
# SIMPLEX Fire Alarm Networks

Simplex Fire Alarm Networks communicate information among distributed Simplex fire alarm control panels. The unique message management system provides fast response to critical functions. Each network card operates independently, providing superior distance coverage between panels communicating on the network.

Systems may be composed of similar capability panels sharing information, Data Gathering Panels (DGPs – which collect field data but do not have displays), or specific nodes may be added to perform dedicated network functions.

Illustrations on the following pages provide a summary of a variety of fire alarm Network applications, multiple topologies and connectivity options. For non-Simplex panels, a Network System Integrator can be used to connect equipment to the Network using optically isolated inputs and relay contact outputs.

# Campus Style Network Multiple Connectivity Options



Network communications among system fire alarm control panels provides up to 7 Network Loops for campus and other high panel quantity applications.

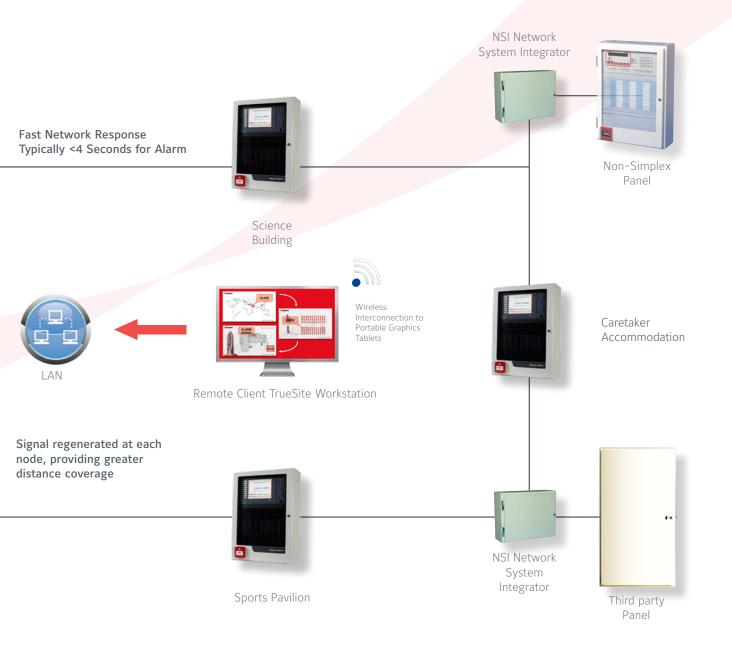
Network-wide initiation of alarm silence, acknowledge, reset; investigation of status and details of system points and point lists

Distributed system operation to ensure excellent survivability; during a communications fault condition, Network nodes remaining connected will regroup and continue communicating.

Flexible Network Annunciator options such as TrueSite Workstations and Network Display Units (NDU).

Use of InfoAlarm+ Command Centre equipped nodes to provide increased network information display capability.

Network level command and control provides manual point control for on/off or disable/enable, as well as gathering specific point detail.



# Boost Value And Performance With Advanced Peripherals

# The First Choice In Intelligent Sensing Technology

Our advanced options and peripherals are designed to ensure compatibility and to work seamlessly with all our fire alarms platforms. These devices and peripherals can help you meet applicable codes and standards and seamlessly enhance system configuration as needs change. Modular design and consistent user interfaces are built into every system and peripheral from SIMPLEX, allowing you to leverage your investment far into the future.



# MX Analogue Addressable Carbon Monoxide, Smoke and Heat Sensors

# **FEATURES**

- Analogue Addressable for full interactive communications
- Intelligent sensing for reduced nuisance alarms
- Lower installation and expansion costs
- Automatic adjustment for dirt, dust, humidity and aging- our sensors even tell you when they need to be cleaned
- Four available options: Photo, Heat, Multi-sensor Photo/Heat and CO/Photo/Heat combining carbon monoxide/smoke/heat in a single base that's easy to wire and allows each sensor to be programmed individually for a different alarm response (heat or smoke), or combines for faster response to fast-flaming fires

#### WHEN TO CHOOSE

- Lowest possible installations and maintenance costs
- Detailed maintenance and alarm reporting to the device level

# **MX** Devices

Intelligent Devices For Easy Manageability, Lower Operational Costs

# **FEATURES**

- Family of robust addressable detection and control devices manual call points, monitors and control devices, heat detectors, smoke detectors and more
- detectors, smoke detectors and more

  Provides interfaces to other systems, such as sprinklers or HVAC, for facility-wide monitoring and control
- Converts non-addressable devices into addressable functionality
- Provides isolators for higher system and network reliability

#### WHEN TO CHOOSE

Ideal for new construction, retrofits or expansion

# 850EMT Diagnostic Tool

When used with compatible Tyco MX detection systems, the 850EMT can interrogate, address and test the 850 Series detectors and devices. Any MX detector can be plugged on directly; MX modules are connected using an ancillary lead (supplied).



# Bidirectional IR Link

A unique feature is the ability of the 850EMT to communicate with the 850 series detectors on some Tyco MX fire alarm systems using a bidirectional infrared wireless link. This allows the commissioning and servicing of 850 Series detectors from ground level without the requirements of high ladders or cherry pickers. Programming, testing and verification of a detector can be carried out by a single visit to the device – from the ground. This is a major benefit: saving time, costs and the health and safety of commissioning technicians.

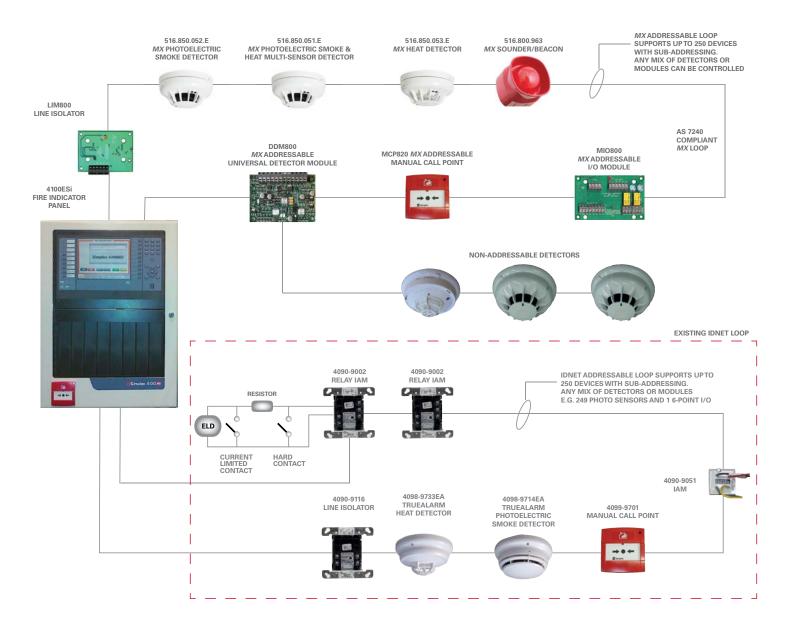
# **FEATURES**

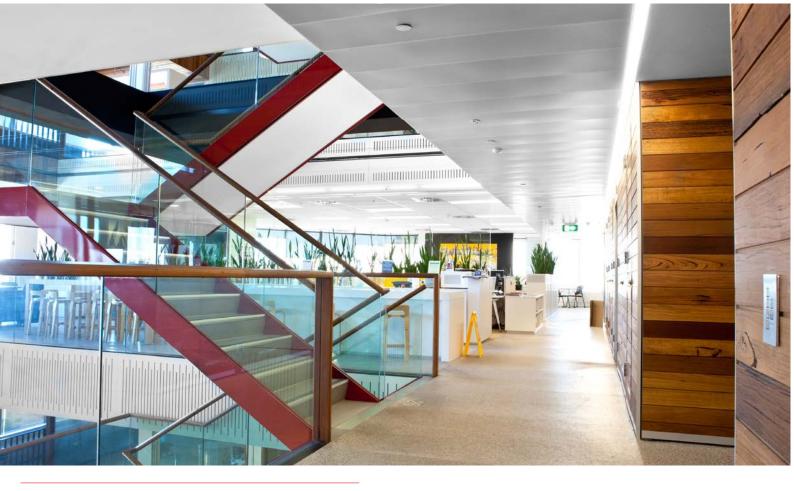
- Simplify & streamline the commissioning process
- Verify that wiring and peripheral devices are operating properly
- Identify problems before system wiring is connected to the control panel
- Download test information from instrument to PC for electronic report generation and archiving

# WHEN TO CHOOSE

A "must have" tool for companies that install and service large
 Simplex 4100 fire alarm systems

# Fire Alarm Systems Applications





# Fewer Nuisance Alarms Greater Peace Of Mind

# The Challenge

- Minimise danger from smoke, fire, water and other potential hazards
- Prevent costly property damage
- Reduce nuisance alarms
- Lower maintenance costs

The first job of any sensor is to protect your operation. The second is to minimise nuisance alarms. Because these alarms are more than just a nuisance. They create costly downtime, disrupt occupants and create unnecessary danger and confusion. Which is why you need *MX*.

The *MX* technology addresses the major causes of nuisance alarms – dirty and overly sensitive sensors fluctuating in variable environmental conditions – with a host of powerful, innovative features:

Drift compensation – Sensors evaluate environmental data and compensate for contamination to maintain detector sensitivity and nuisance alarm immunity.

Automatic sensor cleaning indication – Warns system operators that a sensor is dirty before its drift compensation level has been reached.

A choice of sensor sensitivity modes and Fastlogic algorithms allow you to tailor your fire alarm system to suit the environment it is protecting, whilst minimising nuisance alarms.

Peak value logging – Provides a historical account of how close its sensors have come to their alarm point, allowing you to more accurately set your system for maximum sensitivity without triggering nuisance alarms.



*MX* sensors are engineered to maintain their present levels of sensitivity. As dirt accumulates, the sensors self-adjust, notifying operators of Almost Dirty, Dirty and Excessively Dirty conditions long before they trigger a nuisance alarm. This lets you schedule maintenance on both Dirty and Almost-Dirty sensors at the same time, minimising your facility costs.

# Manage Your Entire Fire And Life-Safety Network From A Single Location

# **Enhanced Protection In Networked Environments**

In today's multi-building, high-rise and campus environments, life safety is a top-of-mind concern. The protection of people, property and assets can hinge on the ability to quickly respond to an emergency and effectively manage system information from a central TrueSite Workstation

# TrueSite Workstation: Exceptional Survivability

Unlike some other systems, the TrueSite Workstation operates as an actual node on the network. This architecture has an advantage of providing fast peer-to-peer linkage with all panels on the network.

High-resolution colour graphics with newly enhanced colour graphical user interface features, the TrueSite workstation provides touch-screen or mouse-driven access to all system control features.

Site plans of your buildings can be imported to graphically display fire, emergency, supervisory, and fault conditions occurring around your site network. Higher screen resolutions provide additional space for detailed graphics.

In the event of an alarm, the screen can automatically display options using customisable icons and site function screens.

Pan and zoom technology makes it easier to zoom in on a specific point of interest, helping to meet unique customer applications and fulfill market-specific requirements.



#### Mobile Client

The TrueSite Workstation Mobile Client brings the features and functionality of the TrueSite Workstation to your Apple or Android™ mobile device or tablet. Available from iTunes\* and Google Play™, the TrueSite Mobile Client helps you access and monitor your facility's TrueSite Workstation remotely, giving you the flexibility to view system information and diagnostics wherever you are.

# Mobile Client Features:

- Connect an unlimited number of Mobile Clients to your
   TrueSite Workstation with the purchase of one client license
- Monitor up to 686 nodes on seven network loops
- Display of Fire Alarm and Priority 2 Alarm conditions
- Display of Supervisory Service and Trouble conditions
- Secure internet connectivity
- System control operations:
   Alarm Silence, System Reset, Audio Control





A Powerful Platform For Centralised Management The system's power is evident in its ability to:

- Support seven network loops and as many as 687 nodes
- Monitor any brand of control panel using agency-listed digital alarm communicators
- Store historical data for up to 10 million events

# Client/Server

If your site has a requirement for multiple workstations, the new client/server functionality provides a cost-effective solution. TSW remote clients can perform all the operator functions of a primary TSW or be provided for annunciation only. Remote clients can be deployed on a dedicated Ethernet network or on an existing Ethernet network and using existing PCs which saves money on installation costs.

