



## The benefits of installing MZX Technology into a Data Processing centre.

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### // Overview:

The Requirements for installing a suitable fire detection and alarm system within a data processing centre usually requires a very comprehensive range of measures starting with a risk assessment covering the physical aspects of the centre, the electrical and mechanical systems, including the fire detection and suppression systems. The Risk assessment should formalise recommendations for the types of fire detectors suitable for use in various areas. The degree of protection may be dependent upon the risk, and be defined as low, medium, high or critical. Systems are usually interconnected to the main building system, where the data centre is part of a larger building complex. The risk assessment should include for the requirements of any fixed fire suppression systems. **The MZX solution from one supplier can meet all of these requirements.**

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// **Risk:** Where fire doors or shutters are controlled by an electromagnetic release mechanism, these should be released on alarm.

Is the door or shutter capable of closing, are all parts of the necessary linkage from detector to release device connected, powered and free from fault. The simplest way of providing a link between the detector, trigger device, and the door is via a relay. The relay however is a simple device; it needs an instruction before it can operate. How sure can you be that it will work when called upon to do so?

// **Solution:**

By specifying and installing an MZX system, fire doors and shutters can be connected to a **TSM800 Door control module**.

The TSM800 is designed especially for fire doors and shutters and has a self-monitoring system that monitors communication and detects the presence of the line voltage. It also monitors the essential secondary supply that feeds the magnetic holding device. The system will detect isolations and faults ensuring that nothing is isolated without knowing. If a fault or isolation is detected the module will release the door to its closed position thereby ensuring that if a fire were to break out the door is already closed ensuring exit routes are kept free from smoke at all times.

// **Risk:** In the event of an alarm the detection system needs to interact with other systems, such as power to electronic equipment, air conditioning systems and to initiate the release of the fire suppression media.

Interfacing with other systems could involve extra low voltage control circuits or power circuits where the switching of mains voltage is required. With the available choice of ancillary modules within the MZX range, standard devices will accomplish all of this.

// **Solution:**

**MZX technology provides dual output paths allowing the connection and control of ancillary modules.** The **Remote Bus** provides for 15 remotely addressed devices of up to 80 I/O each. The

function of the I/O is defined by a multi-purpose module, **MPM800**, as an input, output, printer or repeater panel. Modules include the **IOB800**, 8 digital inputs and 8 relay outputs or the **XIOM** which provides 16 programmable inputs/outputs, will drive led's, relays and has the ability to monitor extra low voltages. Ancillary modules can also be connected to all loops, and be, single, dual or multi I/O. The **RIM800**, single output relay module and the **QMO850**, quad relay module, both have the ability to drive the **HVR800**, high voltage relay module, which is capable of switching 240v.ac up to 10 amps. A range of housings is available, including DIN rail mounts. I/O modules can be programmed for various contact configurations and can operate as a result of a single action, dual (coincidence) action, be instant or delayed.

// **Risk:** The choice of a fire detector can be smoke, heat, combustion gas or mutisensor, point detectors. Also suitable in certain applications are optical beam detectors, aspirating type smoke detectors and line-type heat detectors.

// **Solution:**

By specifying and installing an **MZX technology** system we offer reliability in all of our components. The **850 series addressable point detectors** have added protection applied to printed circuits and vital components to enable them to survive in difficult environments. **Threshold compensation** overcomes the effects of dirt and dust and prolongs the life of the detector. The **OSID (Open Area Smoke Imaging Detector)** and **Universal Fire and gas Detection Module, DDM800, combine** to allow direct connection to the addressable loop of the unique dual light frequency (UV & IR) optical beam type smoke detector. The OSID is immune to many false alarm phenomena and its coverage can be likened to that of a CCTV camera, as a range of imagers are available for wide medium and narrow angle coverage. The imager sees the transmitted beam, from up to 7 emitters, as an array of pixels which also gives the detector immunity from

building movement. The **ICAM AS 460 and 461** single or dual air sampling system combines the best of the **850PC mutisensor** with proven air sampling techniques. The **Vesda Laser Compact, Laser Plus and Scanner units** connect directly to the loop or via the **VIO800 MX Vesda Interface**.

In MZX Technology, integration of these systems is well thought out, engineered, tested and fully supported and certified to **EN54-13 Compatibility of Components and Systems, as certified by VdS**.

// **Risk:** Control of the fixed fire suppression system should be in accordance with EN12094, EN54-2 &4.. Often the building fire detection and alarm system is separate to the data centre system but the two systems need to communicate.

// **Solution:**

**MZX technology** offers a range of controllers from the compact MZX250 single loop, through the modular MZX2 panel which extends up to 8 loops. Controllers can be easily networked by adding the **TLI800EN network card**. An MZX network can be extended up to 99 panels (99000 addresses), with panels interacting with each other where required. The MZX network is a true peer to peer network which remains unaffected by a single node failure. Furthermore failure of any panel's main processor will not inhibit transmission of any fire alarm or fault signal from that panel across the network to a designated panel's zonal display. **The network is LPCB, EN54-2 and EN54-13 approved.**

**The MZX E extinguishing panel is approved to EN12094-1:2003, EN54-2 and 4.** This comprehensive panel will interface to the data centre fire detection panel and will provide all necessary control and functions required for a suppression panel. These include, control inputs for auto/manual etc., monitored inputs such as gas discharged etc., timers, monitored actuator/solenoid release, (metron or solenoid), and extensive disablement options. The panel has extensive configuration options yet simple to install programme and commission.

ZETTLER, is a leading brand of fire detection, security, and care communications products in the European market. The ZETTLER fire detection product line includes a wide range MZX TECHNOLOGY EN54 CPD approved fire detection products carrying approvals and cross-listings, including VdS and NF, for all European countries. The ZETTLER care communications product line is a technology leader providing the latest IP based Nursecall, Emergency Call, Communication and Management solutions for care homes, hospitals, prisons, and related markets. The ZETTLER product lines are available through ZETTLER dealers as well as many ADT and Tyco offices around the world. For more information, visit [www.tycoemea.com](http://www.tycoemea.com).