Kentec
Electronics Ltd

Powerful and Sophisticated
Analogue Addressable Fire Panel

Taktis

Power, Intelligence......
with a sense of feeling

Introduction

Taktis® is Kentec's most powerful and sophisticated analogue addressable fire panel. Intelligent and technically robust, it has enhanced integration and networking capabilities to meet the current and future needs of small to larger buildings and installations.

Initially configured as a fire detection and alarm system, the flexibility of Taktis is such that it can be re-configured to realise many other control and indication applications, with direct integration into intelligent buildings.

Available in four and eight slot variants, Taktis fire control panel ranges from two to 16 detection loops. Taktis is approved for networks of up to 32 panels (approval for networking of up to 127 panels pending), making it ideal for the largest sites including schools, hospitals, multi-site retail/supermarkets, critical infrastructure and major commercial and industrial facilities.

A range of protocols are supported to give installers and end-users maximum choice in their systems' design, and the scalable nature of the product provides the highest level of future-proofing and networking possibilities.
The modular nature of Taktis allows all field wiring to be connected to a passive mother-board enabling addition, re-configuration or replacement of all electronic hardware without the need to disconnect any field wiring.

This modularity also allows each panel to be customised with addressable loop detection circuits, conventional detection circuits, relay cards, additional sounder outputs or programmable I/O modules as required.

As a truly open protocol panel it offers installers and their customers maximum flexibility in systems' design, site-customisation and the third-party devices that they use. Not only does Taktis provide solutions to the most technically challenging applications in life safety, it will also deliver added value, market advantage and a competitive edge to your business.

Features

> Supports Apollo & Hochiki protocols
> Two to eight loop or two to 16 loop versions
> 500mA loop current
> Four programmable sounder circuits each rated at 2.5A
> 5.25A or 10.25A power supply options
> Enclosure options to suit 26Ah or 45Ah battery options
> Three programmable inputs
> Five programmable relay outputs
> Up to 512 programme Input/Output via optional plug in and serially connected expansion cards
> Hard-wired fire and fault routing inputs and outputs

> Over 4000 sub address points per panel
> Option to 'invert' inputs and outputs
> Network up to 32 panels
> Configurable via a USB flash drive or alternatively a PC USB serial connection
> Optional Media Gateway communications card
> Compatible with Ockular management solution
> Approved and compliant with EN54-2, EN54-4 and UL864 10th edition. EN54-part 13 approved
> VdS approved
   EN54-4 and UL864 10th edition. EN54-part 13

Company Overview

Kentec Electronics is one of the world's leading life safety solutions manufacturer of conventional, analogue addressable fire detection and extinguishant control panels.

Founded in 1985, Kentec is an end-to-end manufacturer, with everything sold being made in the UK. It employs approximately 230 members of staff in its production facility, head office and research and development department.

In addition to design and manufacture, Kentec provides technical support specified to the local standards and customer requirements of over 90 countries worldwide. With a commitment to meeting the needs of individual national markets, Kentec has achieved a global reputation, resulting in its life safety systems being installed in numerous prestigious sites across the world.

Kentec manufactures products approved to EN54, EN12094, UL, FM, NFPA and marine classification societies.

Product Overview

Zone Indicators

Up to 2,000 detection zones with the first 48, 96 or 144 zones displayed by light indicator as standard options.

Taktis Display

Taktis utilises a full colour, 7" 800x480 touch screen graphical display to provide a clear, simple and intuitive user interface. An 80 character zone location and 80 character device messages enables a clear, concise description of each detection device location to be configured. Resistive touch screen technology ensures control functions can be used.

Function Buttons

Up to 24 customer specific function buttons may be configured to provide control, disablement and engineering functions. The function buttons can be configured to be either available or hidden for each log-in profile.

Backlight Control

The built-in light sensor allows the display backlight to be configured to follow the ambient light levels or automatically dim after a period of inactivity.

Event Log

A 10,000 entry event log records all system activity to one second resolution. The log is held in secure memory and is retained when power is removed from Taktis. Powerful filtering allows the log to be sorted by event type, between dates, by zone, by panel and by address. Using the Loop Explorer 2 configuration programme, the event log can be downloaded and stored as a comma separated values (CSV) format.

Connectivity

The Media Gateway card plugs into one of the panel slots and provides connectivity to our servers using IP, GSM or Dial Up connectivity. The Media Gateway card is also used to meet integration application requirements.

The Taktis Media Gateway provides a means for the system to transmit real information back to our dedicated server network. This data is then accessed using the Taktis Virtual Resource (VR) software suite via a web browser.

User Access

Access to the Taktis menu and control functions is provided by a unique six-digit pass code or by the optional enable control key switch. Up to 64 individual log-in accounts can be configured, with different profiles and access permissions.

Powerful, Network-wide Cause & Effects

Taktis cause and effect capacity supports 5,000 cause and effects comprising up to 40,000 inputs/outputs across the network. The introduction of groups in Taktis allows rationalisation and simplification of the system configuration. Support for up to 5,000 groups and up to 50,000 devices is provided.

Printer Option

A 40-character front loading thermal printer prints all events as they occur. The printer can also be used to print all/selected event log entries. (Available on 0 and 48 zone only).

Languages

Taktis has multiple language options expanding the availability to global partners.

Below is list of all languages currently available, with new languages regularly added.

> Amharic
> Arabic
> Bengali
> Bulgarian
> Croatian
> Czech
> Danish
> Dutch
> English
> Estonian
> French
> Finnish
> German
> Hungarian
> Italian
> Norwegian
> Portuguese

> Romanian
> Russian
> Serbian
> Slovenian
> Slovakian
> Spanish
> Swedish
> Thai
> Chinese
> Turkish
> Vietnamese

BS-EN12094-1
KM 96761

SIGNALING
UL
LISTED

Taktis Vision

Taktis Vision provides a means of allowing full display and optional control of the Taktis Fire Alarm control panel from a small and unobtrusive local control station.

Based on a new hardware and software platform, the large, full colour graphical display with touch screen functionality, delivers information on the status of the fire alarm system to single or multiple locations.

Taktis Vision repeaters can be configured to offer full display and control to replicate the functionality of the Fire Control panel or to operate as a simple, display-only device for applications where access to control the Fire Alarm system would be inappropriate.

VR Nimbus

The remote management features offered by VR Nimbus can result in reduced fault calls, improved technical support, efficient and proven maintenance, reduction of unwanted alarms, a full audit trail and improved overall service to the end user.

It provides system designers, integrators and service companies with the ability to remotely access and comprehensively manage any system using intelligent analysis of data collected from those systems. End-users and facilities managers can also greatly benefit from the powerful features that are available with VR Nimbus.
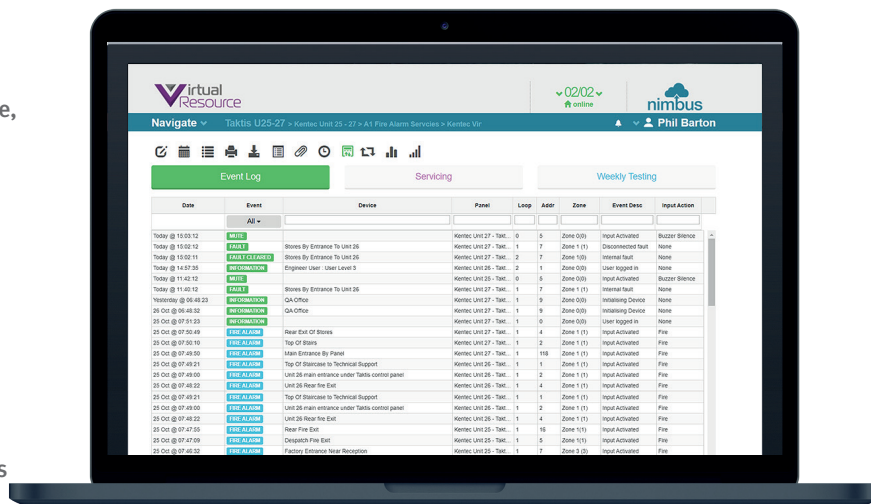
Taktis/Syncro Bridge Functionality For Phased Upgrades

Kentec has a unique solution for migrating Syncro panel networks to the latest Taktis technology protecting the end user's long-term investment.
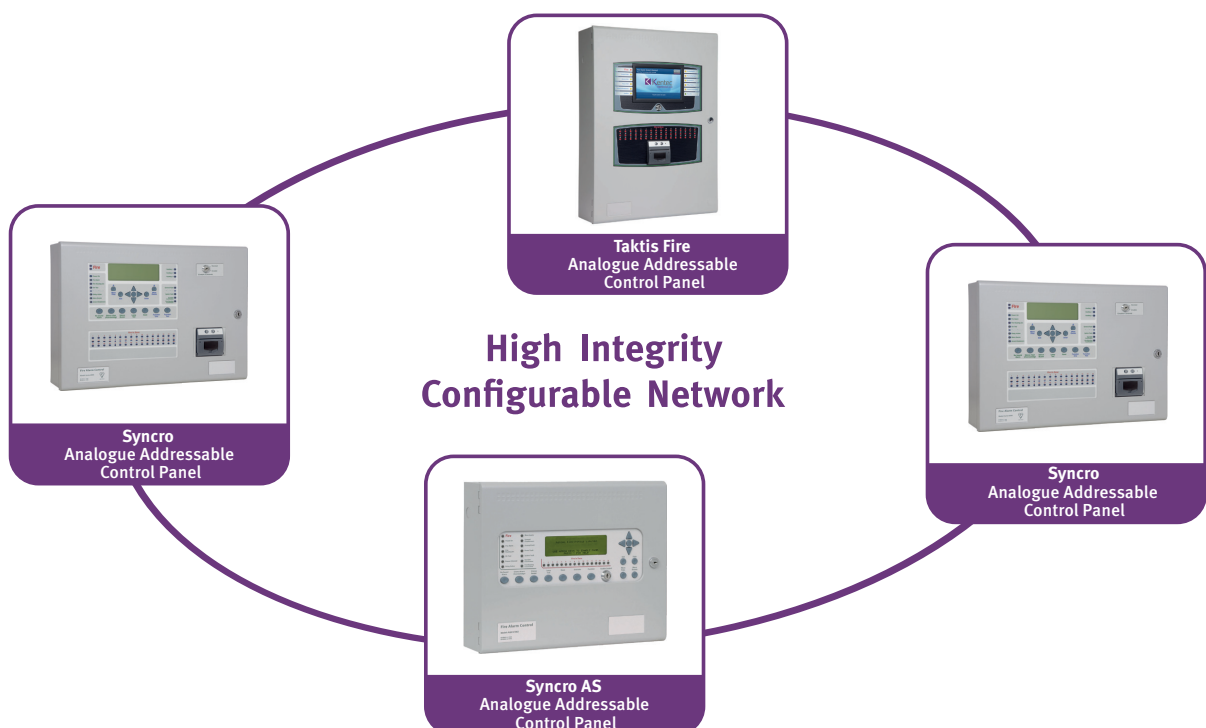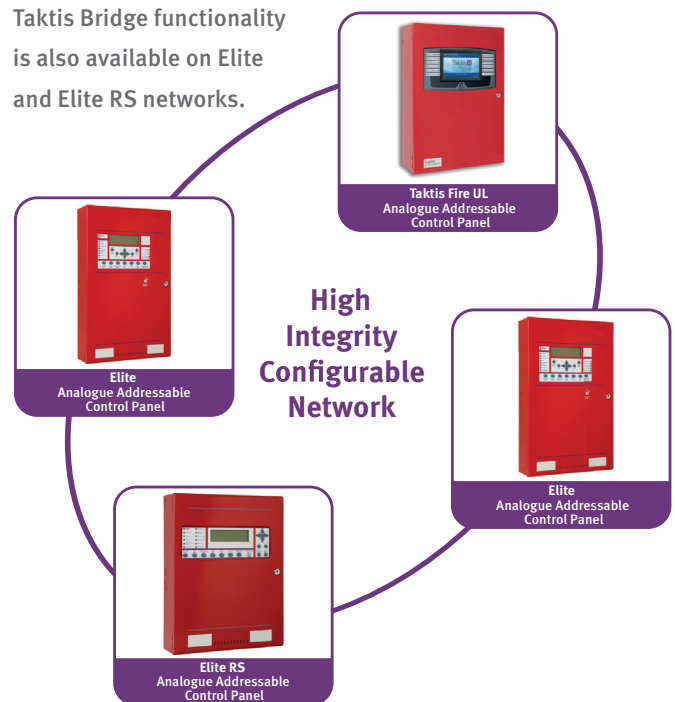
With the Syncro/Taktis bridge functionality customers can upgrade their existing networks from legacy Syncro fire panels to the new highly-sophisticated and scalable Taktis control panel. Upgrades can be carried out on a panel-by-panel basis, with reduced capital expenditure and minimising essential system downtime.

The bridge functionality enables customers to replace a Syncro panel with Taktis within a Syncro network. On a mixed network Taktis panels will function as a Syncro, but once the network is replaced, the full functionality of the feature-rich Taktis will become available. This also enables customers to expand their network in line with Taktis' scalable capabilities.

This bridge capability enables you to plan and develop a fire system in line with fire safety requirements to the latest product range, without causing budgetary difficulties. Importantly this can be done with minimal disruption to the occupants with less cost, stress and risk for all involved.

Taktis Vision repeaters can also be installed on a Syncro network using the bridge feature, providing an easy-to-use, full-colour, touch-screen interface that delivers information on the status of the fire alarm system to single or multiple locations.

Taktis Bridge functionality is also available on Elite and Elite RS networks.

Taktis Fire UL
Analogue Addressable
Control Panel

Elite
Analogue Addressable
Control Panel

Elite
Analogue Addressable
Control Panel

Elite RS
Analogue Addressable
Control Panel

High Integrity Configurable Network

Taktis Fire
Analogue Addressable
Control Panel

Syncro
Analogue Addressable
Control Panel

Syncro
Analogue Addressable
Control Panel

Syncro AS
Analogue Addressable
Control Panel

High Integrity Configurable Network

Ockular®

A powerful and sophisticated graphical representation of your sites, Ockular gives building managers complete monitoring and control over fire detection providing a comprehensive fire risk and incident management system.

Where time is of the essence, automated control enables site managers to respond quickly and efficiently to a fire event. Ockular plays a crucial role in safeguarding people, vitally important information and property.
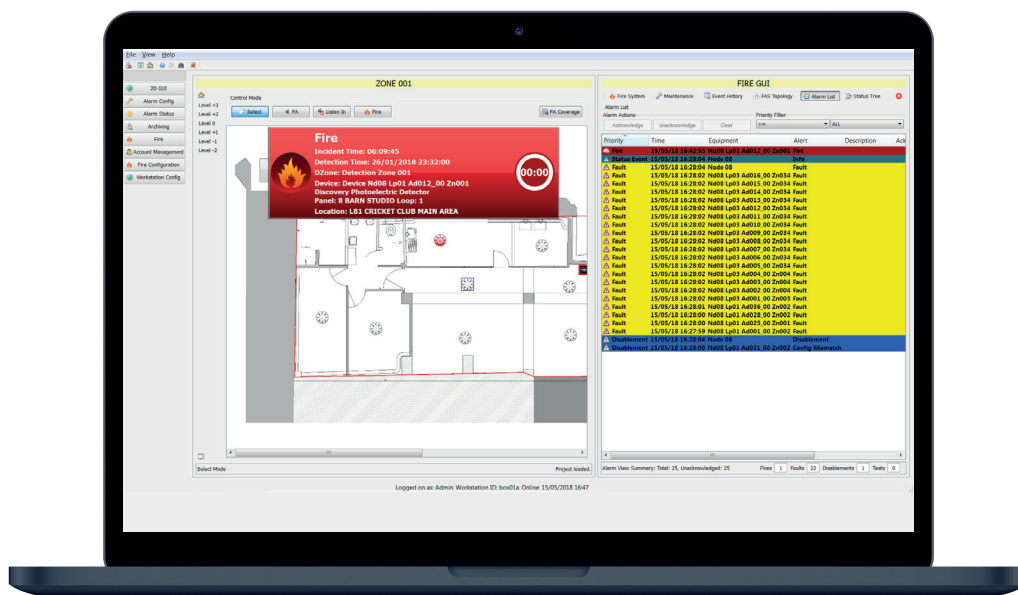
Power Supply Options

Taktis is available with two power supply options, each available in 230V or 115V mains voltages

> 5.25A (supports up to 26Ah batteries)
> 10.25A (supports up to 45Ah batteries)

Note: The standard depth enclosure (150mm deep) houses up to 26Ah batteries and the deep enclosure (190mm deep) houses up to 45Ah batteries.
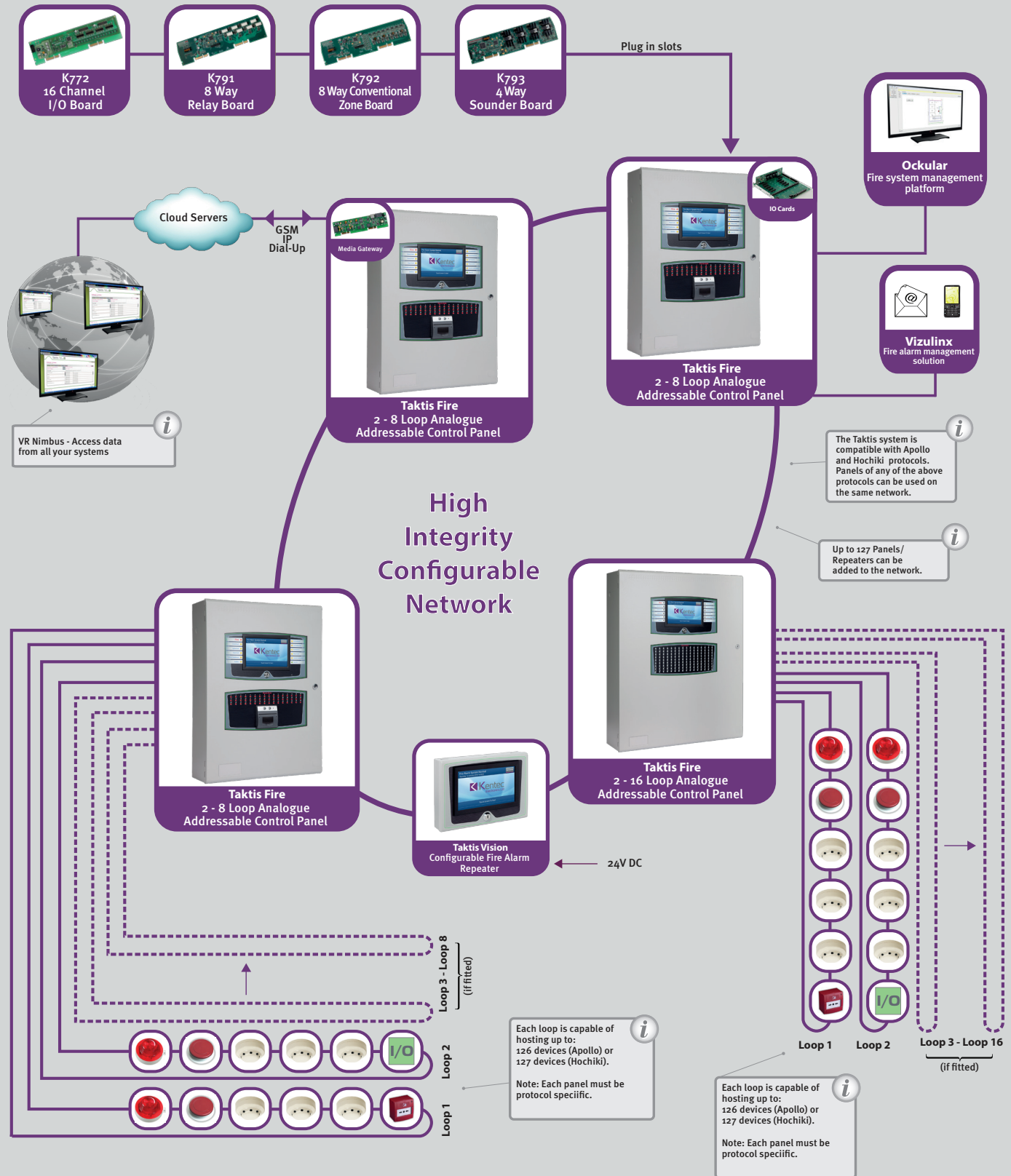
Expansion Options

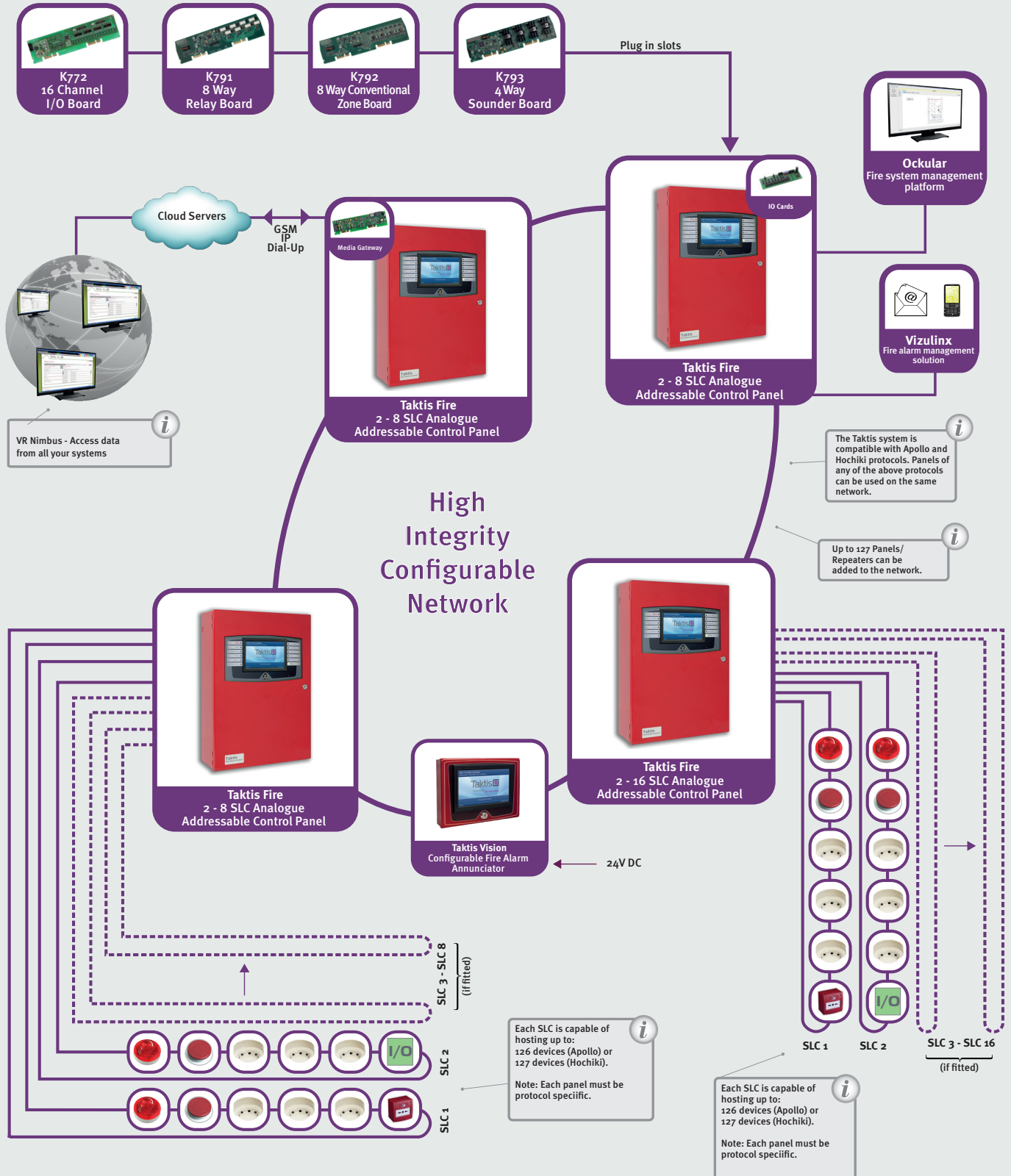Taktis I/O cards can be fitted in spare slots within the panel. The family includes:

> Eight way conventional detection board
> Four way sounder output board
> Eight way volt free relay contact board
> 16 channel programmable I/O board

Taktis Network Diagram

K772
16 Channel
I/O Board

K791
8 Way
Relay Board

K792
8 Way Conventional
Zone Board

K793
4 Way
Sounder Board

Plug in slots

Ockular
Fire system management
platform

IO Cards

Cloud Servers

GSM
IP
Dial-Up

Media Gateway

Taktis Fire
2 - 8 Loop Analogue
Addressable Control Panel

Taktis Fire
2 - 8 Loop Analogue
Addressable Control Panel

Vizulinx
Fire alarm management
solution

VR Nimbus - Access data
from all your systems

The Taktis system is
compatible with Apollo
and Hochiki protocols.
Panels of any of the above
protocols can be used on
the same network.

High Integrity Configurable Network

Up to 127 Panels/
Repeaters can be
added to the network.

Taktis Fire
2 - 8 Loop Analogue
Addressable Control Panel

Taktis Vision
Configurable Fire Alarm
Repeater

24V DC

Taktis Fire
2 - 16 Loop Analogue
Addressable Control Panel

Loop 3 - Loop 8
(if fitted)

I/O

Loop 2

I/O

Loop 1

Each loop is capable of
hosting up to:
126 devices (Apollo) or
127 devices (Hochiki).

Note: Each panel must be
protocol speciific.

Loop 1

Loop 2

I/O

Loop 3 - Loop 16
(if fitted)

Each loop is capable of
hosting up to:
126 devices (Apollo) or
127 devices (Hochiki).

Note: Each panel must be
protocol specific.

Taktis UL Network Diagram

K772
16 Channel
I/O Board

K791
8 Way
Relay Board

K792
8 Way Conventional
Zone Board

K793
4 Way
Sounder Board

Plug in slots

IO Cards

Ockular
Fire system management
platform

Cloud Servers

GSM
IP
Dial-Up

Media Gateway

Taktis Fire
2 - 8 SLC Analogue
Addressable Control Panel

Taktis Fire
2 - 8 SLC Analogue
Addressable Control Panel

Vizulinx
Fire alarm management
solution

i VR Nimbus - Access data
from all your systems

i The Taktis system is
compatible with Apollo and
Hochiki protocols. Panels of
any of the above protocols
can be used on the same
network.

i Up to 127 Panels/
Repeaters can be
added to the network.

High
Integrity
Configurable
Network

Taktis Fire
2 - 8 SLC Analogue
Addressable Control Panel

Taktis Vision
Configurable Fire Alarm
Annunciator

Taktis Fire
2 - 16 SLC Analogue
Addressable Control Panel

24V DC

SLC 1

SLC 2

SLC 3 - SLC 16
(if fitted)

SLC 3 - SLC 8
(if fitted)

SLC 2

SLC 1

i Each SLC is capable of
hosting up to:
126 devices (Apollo) or
127 devices (Hochiki).

Note: Each panel must be
protocol specific.

i Each SLC is capable of
hosting up to:
126 devices (Apollo) or
127 devices (Hochiki).

Note: Each panel must be
protocol speciific.

Technical Info

Two-eight loop (four-slot) Enclosure

> Size –
>> – 420mm (W) x 590mm (H) x 153mm (D) (Standard)
>> – 420mm (W) x 590mm (H) x 203mm (D) (Deep)
> Construction – 1.5mm mild sheet steel
> Cable entry –
>> – 28 knockouts top, 19 knockouts back, one knockout each side, two knockouts bottom (Standard)
>> – 38 knockouts top, 19 knockouts back, one knockout each side, two knockouts bottom (Deep)
> Battery Capacity – Up to 26Ah Standard, up to 45Ah Deep

Two-16 loop (eight slot) Enclosure

> Size –
>> – 540mm (W) x 720mm (H) x 212mm (D) (Deep)
> Construction – 1.5mm mild sheet steel
> Cable entry –
>> – 38 knockouts top, 25 knockouts back, two knockouts each side, two knockouts bottom (Standard)
>> – 50 knockouts top, 25 knockouts back, two knockouts each side, two knockouts bottom (Deep)
> Battery Capacity – Alternative power and battery options available

All Models

> Finish – Epoxy powder coated
> Colour – Lid & Box – BS 00 A 05 fine texture
> Colour – Controls Plate – RAL7016
> Power supply voltage – 230V AC or 115V AC
> Power supply rating at 24V DC – 5.25A (charges up to 26Ah) or 10.25A (charges up to 45Ah)
> Display – Full colour 800 x 480 LCD with resistive touch screen and automatic back-light dimming

> Printer – 40 column, front loading thermal (optional)
> Zone LED indicators – Up to three banks of 48 (144) as standard
> Software zones – 2,000
> Software groups – 5,000
> Event log – 10,000 events, one second resolution. Filterable and printable.
> Detection loops – two to 16, added two at a time (K758 dual loop card)
> Detection loop current – 500 milliamps each maximum
> Sounder circuits – four each rated at 2.5A, 24V DC, programmable
> Auxiliary 24V supply 1 – 24V DC fused at 500 milliamps
> Auxiliary 24V supply 2 – 24V DC fused at 500 milliamps
> Default relays – Fault, Fire, Alarm, Programmable one and Programmable two (all re–programmable)
> Programmable inputs – three, activated by volt free contacts
> Auxiliary Serial port A – RS232 programmable
> Auxiliary Serial port B – RS232 programmable
> Ancillary I/O board serial port – RS485 programmable
> Fire Routing (Ifam) serial port – RS485 programmable
> USB host port – USB type A
> USB device port – USB type B
> Fire routing output – Monitored
> Fire routing input – Monitored
> Fault routing output – Monitored
> Fault routing input – Monitored
> Extinguisher output – Monitored
> Extinguisher input – Monitored
> Extinguisher fault input – Monitored