

Fire detection and evacuation solutions that save lives.

Integrated Fire Detection, Emergency Warning and Intercommunication System COMBO FDCIE - EWCIE and EICIE

Typical Applications

- High Rise Residential Multi Use
- High Rise Office Towers
- Universities, Colleges and School Campuses
- Commercial Centres
- Retail Shopping Centres
- Hospitals & Health Care Facilities
- Elderly Care Facilities
- Subway and Metro Railway projects
- Airports
- Stadiums



Product Overview

At the heart of Ampac's integrated "Combo" 3-in-1 system sits the high-quality AS7240-2&4 and AS4428-3 approved **FireFinder Plus** intelligent analogue addressable fire alarm control panel combined with an **EvacUElite** Emergency Warning System (EWS) and optional Emergency Intercom System (EIS)

The **FireFinder Plus** is suitable for small, to very large fire detection systems. The network can contain up to 250 loops across 64 combined panel nodes. Up to 31,500 detectors including control devices can be accommodated.

FireFinder Plus is compatible with a range of world class intelligent detectors, loop powered devices and a large range of programmable add-on modules. The integrated combo system provides a flexible and reliable solution to meet the requirements of modern fire detection & warning systems.

Providing early fire detection and control, the Ampac integrated system offers industry proven Evacuation system and intercommunication technology which are AS4428-16 and AS4428.4 compliant. The system contains Public Address capabilities and messaging solutions which keep people protected and informed at all times, especially during emergencies.

The fire detection and warning system architecture is modular and interconnects via a High Level Interface. The warning system provides basic easy to establish cause and effect step phasing sequences through to bespoke "site specific" evacuation routines and messaging solutions for up to 512 'evacuation zones' using a high speed digital backbone audio bus.

A mix of fire detection nodes and / or Combo panel nodes can be configured as a distributed system using redundant comms loop networks, utilizing Cat 5e/ 6, Copper or Fiber Optic.

The solution can include emergency intercommunication (EICIE) complaint with AS4428.4 which allows emergency management to communicate with building fire wardens during an emergency.

The site management solution can be taken to the next level by installing Ampac SmartView, a site specific graphics system detailing site maps, activity and user control screens to assist emergency management.



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Combo Power Supply architecture

The combo system requires one 240v AC power source and two batteries.

Two isolator switches are provided on the primary PSU module for EWCIE and FDCIE



Fire Control Panel Features

- AS7240-2 & AS7240-4 Compliant
- ♦ Expandable 1-8 Loops per node
- 500mA Loop Current with 126 devices per loop
- True Peer to Peer networking
- ♦ 100 nodes /panels with up to 250 loops
- ♦ 2000 programmable fire zones

Large range of configurable add-ons

- ♦ 32 Zone Alarm Indicator Module
- Zone Disable and Indicator Module
- ♦ 8 Zone Conventional Board
- High Level Interface for SmartView Graphics and BMS
- High Level Interface for warning system
- Fire Fan Control Module*
- ♦ Agent/Gas Release Module*
- ♦ 8-way Switch and Indicator Module*
- ♦ 16-way Input Board*
- ♦ 8-way Relay Board*
- ♦ 8-way Sounder Board*
- ♦ Smart Terminal (LCD Repeater)*

Emergency Warning Panel Features – EWCIE

- AS4428-16 & AS4428.4 Compliant
- Up to 512 Evacuation Zones Configurable
- Up to 64 Combo System Node / Panels
- ♦ Combined FDCIE and EWCIE & EICIE PSU
- Modular scalable PSU
- Universal Rack Architecture scalable
- Digital Audio Network
- Configurable Panel / Node Priority
- Storage for internal digital messages
- Range of plug in Modules
- GUI Graphical User Interface
- Dual 25 Watt, 50W, Quad 150W Amplifiers
- DCPU Main Control Board
- MIC Input Module
- MOC Output Module
- ILC Radial WIP Card
- LILC Loop WIP Card
- Remote Paging Console

Emergency Intercommunication System EIS

- AS4428 –4 Compliant
- Up to 1024 handsets configurable
- Radial Handsets
- Loop addressable Handsets
- Each Node is Configured for Priority

^{*} Modules not tested by BRE-LPCB



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Specifications- Combo Common Attributes		
Cabinet Options	13U Wall Mounted 24U Floor Standing	
Combo Dimensions (mm)	13U - H 900 x W 650 x D 380 24U - H 1800 x W 650 x D 380	
IP Rating	IP30	
Colour	Surf mist	
Material	1.2mm Mild steel	
Operating Voltage	253 - 195.5 V AC	
Temperature Range	-5°C to +40°C	
Humidity	0% to 95% (Non-Condensing)	
Power Supply AS7240.4	Combined FDCIE EWCIE EICIE PSU FDCIE power -5 Amp (Maximum)	
Power Supply	13U - Max 2.4 kW (2xPSU modules) 24U - Max 3.6 kW (3xPSU modules)	
Max Battery Size (Pair)	13U - 100 Ah 24U - 190Ah	
Battery Type: Discharge Cut-off voltage:	2 x XX Ah 12V SLA up to 190Ah Max 21VDC	
Mains Current (Max)	13U - 13 Amps with 25Amp MCB 24U - 19.5 Amps 25A MCB	

Specifications - Capacities - EWIS	
Max No of Emergency Zones	512
Max No of Warden Handsets	1024
Maximum No of Nodes	64
Amplifiers Sizes	Dual 25 Watt, 50 Watt 150 Watt (4 Way Splitter)
Visual Warning Device Outputs Limited to 2 Amps Max Current 6ATotal	2 Wire Single End O/Ps 8 x 750mA @24V OR Reverse Polarity O/P 4 O/Ps x 1.5 Amps Each
Graphical User Interfaces (Metalwork space)	13U - 4 24U - 8
Universal Rack Frames	13U - 2 24U - 5
Networking Specifications (Node to Node)	2 core 0.75mm² Twisted & Shielded Copper 8-10 twists /m minimum or better <750m Cat 5e/6 (up to 100M) Single Mode Fibre Multimode Fibre

Specifications- Fire	
Fault supervision -	Overcurrent & Short circuit
Programmable Outputs	4 x 24VDC @1A 10K EOL
Programmable Relays	5 x Voltage Free 24VDC @1A
Aux Power Outputs	2 x 24VDC @1A
Programmable Inputs	4 x O/C & S/C 10K EOL
Comms external to FACP	RS485
Cable Addressable Loop	2 Core twisted 1.5 –2.5mm
Universal Rack Frame - EWIS	
No. of Slots / Rack	16 + Dedicated Slot for CPU
Max No. of Dual 25 Watt Amplifier Cards	8
Max No. of 50 Watt Amplifier Cards	8
Max No. of 150 Watt Amplifier Cards	8
Max No. of EIS Line Cards (Radial or Loop)	16
Max No. of Multi-Purpose Interface Cards	16

Max Current Per Rack	48 Amps
Graphical User Interface – EWIS	
Description	9 inch TFT LCD 800 x 480 with LED backlight and resistive touch screen
Microphone	$600~\Omega$ with capsule monitoring
Emergency Voice Communication Handset	Electret capsule with 150 Ω speaker
USB Support	Host (USB stick) and Device (mini USB) connection
SD Card Support	Yes
HLI (to FDCIE)	$1 \times RJ45$ connector with RS485 signal levels
Ethernet Support	$2 \times RJ45$, with proprietary power and transformer isolation
Inputs	2 x monitored and 2 x unmonitored
Current Consumption	0.185 Amps (Quiescent)
	0.207 Amps (Active)

Max No. of Multi-Purpose Output

Cards