Fire detection and evacuation solutions that save lives.

COMBO - Integrated Fire Alarm, Voice Alarm & EVCS System

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

EvacU[Elite] 24U Combo Cabinet (13 & 16U options also available)

Product Overview

At the heart of Ampac's integrated "Combo" 3in1 system sits the high-quality EN54-2&4 approved **FireFinder Plus** intelligent analogue addressable fire alarm control panel combined with an **EvacUElite Voice** Evacuation (VACIE) *and optional Emergency Voice communication* system (EVCS)

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 a modern fire detection and voice evacuation system.

Providing early fire detection and control, the Ampac integrated system offers industry proven Voice Alarm, Evacuation which is EN54-16 compliant. The EVCS is designed to meet the requirements of BS5839-9.

The system provides Public Address capabilities and messaging solutions which keep people protected and informed, especially during emergencies.

The Fire Detection and Voice Alarm system architecture is modular and interconnects via a High Level Interface. The Voice Alarm system provides basic easy to establish cause and effect 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 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.

Talk to your local Ampac representative about project requirements.

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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 FDCIE & *EWCIE (*VACIE & EVCS)

Fire Control Panel Features:

- EN54-2 & EN54-4 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 VACIE & EVCS
- 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)*

* *FACP modules not tested by BRE,LPCB*

Voice Alarm Control Panel Features -VACIE

- EN54-16 & EN54-4 Compliant
- Up to 512 Evacuation Zones Configurable
- Up to 64 Combo System Node / Panels
- Combined FDCIE and VACIE PSU
- Modular PSU
- Universal Rack architecture
- Digital Audio Network
- Configurable Panel / Node Priority
- Storage for internal digital messages
- Multi Language support (French, Dutch)
- 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 Outstation Card
- LILC Loop Outstation Card
- Remote Paging Console

Emergency Voice Communication System EVCS

- BS5839-9 Compliant
- Up to 1024 Outstations configurable
- Radial Outstation Handsets
- Loop Outstation Handsets
- Each Node is Configured for Priority

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Specifications– Combo Common Attributes	
Cabinet Options	13U & 16U Wall Mounted 24U Floor Standing
Combo Dimensions (mm)	13U - H 900 x W 650 x D 380 16U - H 1200 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	-5°C to +40°C
Humidity	0% to 95% (Non-Condensing)
Power Supply EN54.4	Combined FDCIE VACIE EVCS PSU FDCIE system - 5 Amps Maximum
Power Supply	13U - Max 2.4 kW (2xPSU) 16U - Max 2.4 kW 24U - Max 3.6 kW (3xPSU)
Max Battery Size (Pair)	13U - 100 Ah 16U - 24U 190Ah
Battery Type: Discharge Cut-off voltage:	2 x XXX Ah 12V SLA based on load 21VDC
Mains Current (Max)	13U - 13 Amps with 25Amp MCB 16U - 13 Amps with 25A MCB 24U - 19.5 Amps 25A MCB

Specifications- Capacities VACIE– EVCS	
Max Voice Alarm Zones	512
Max Outstations	1024
Maximum 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 16U -6 24U - 8
Universal Rack Frames	13U - 2 16U -3 24U - 5
Networking Specifications (Node to Node)	2 core 0.75mm^2 Twisted & Shielded copper <750m Cat 5/6e (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 - VACIE –EVCS	
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 No. of Multi-Purpose Output Cards	6
Max Current Per Rack	48 Amps

Graphical User Interface VACIE – EVCS	
Description	9 inch TFT LCD 800 x 480 with LED backlight and resistive touch screen
Microphone	600 Ω 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 x RJ45 connector with RS485 signal levels
Ethernet Support	2 x 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)