# **W VIGILANT**

# T-Gen2

# Emergency Warning System - Amplifier/Tone Generator

### **Features**

- 60W or 120W D-Class Amplifiers
- · Emergency PA microphone input
- 2 Audio line inputs
- 6 General purpose inputs and 4 O/C outputs
- · Strobe output
- Programmable site-specific configuration
- Downloadable tones / messages
- Recordable messages
- Additional storage via microSD card
- Designed to comply with AS 4428.16

#### T-Gen2

The VIGILANT T-Gen2 is an Emergency Warning System (EWS) with a supervised 100V speaker line and digitised speech messages. The T-Gen2 is typically installed in a fire alarm panel; it is readily mounted in the VIGILANT *MX1* and SIMPLEX 4100ESi panels, or in stand-alone Grade 3 Building Occupant Warning Systems or Grade 2 Emergency Warning Systems.

## 60W and 120W RMS Amplifier Models

Two amplifier modules are available, with additional units able to be slaved with a master unit.

T-Gen60 is able to drive a 100V line speaker output with up to 60W of load. It supports two non-emergency audio inputs (background music, paging), a microphone audio input (speech or paging), 6 supervised inputs (Alarm, Fault, Paging), 4 open-collector outputs, normally-energised Fault relay, and a supervised single polarity 2A strobe output. FP1116

T-Gen120 is able to drive a 100V speaker load up to 120W and supports the same features as the T-Gen60.





### Tone Generator

The T-Gen2 amplifier module generates emergency warning signals for alarm and occupant warning systems where a full EWCIE to AS 1670.4 is not required. Different tones can be selected including AS 4428.16, AS 2220 Alert and Evacuate signals and the ISO 8201 Temporal pattern Evacuate Signal. T-Gen2 provides speaker line fault supervision, public address facilities and pre-recorded voice messages.

# Operation and Configuration

Operation of the T-Gen2 is controlled by the programmable configuration held within it. This configuration can be selected from a number of pre-defined setups or specifically modified using a PC software – SmartConfig. This provides flexibility to customise the programming configurations and interface to other optional modules.

# **Optional Modules**

The T-Gen2 can be coupled with these optional

#### 4-Way 100V Switching Module FP1117

This splits the T-Gen2's 100V speaker output into four 100V speaker circuits, each with its own supervision. Each output can also be disconnected from the 100V feed, allowing the T-Gen2 to control which outputs receive the audio signal, e.g., for area paging. Ideal for customising public address areas.

#### 4-Way 100V Splitter Module FP1118

This optional module is ideal for splitting one T-Gen2 output into multiple floors or between common areas and apartments so that each output has short-circuit isolation. No control of the outputs is otherwise possible. A fault condition is signalled to the T-Gen2 via the 100V line.

#### 3U Grade 3 User Interface Door FP1121/22/23

A 3U door with single zone Grade 3 User Interface, microphone and looms.

#### 3U EWS User Interface Door FP1124/25

A 3U 19inch rack mount door with Grade 2 User Interface controls for 4 zones, microphone and looms.

#### 3U Grade 2 16-Zone Extender FP1126/27

A 3U 19inch rack mount door with 16 zones of Grade 2 User Interface - fitted with 8-Zones only. Connects to FP1124/25.

#### 8-Zone Expansion Board FP1128

For use with the FP1126/27 16-Zone Extender door, increasing the display capacity from 12 to 20 zones.

#### FP1143

T-Gen2 High Level Interface (HLI) module allows T-Gen2 to communicate with VIGILANT MX1, MX4428, F3200 over RZDU or SIMPLEX 4100ESi over 4100Comms to receive zone alarm information and transmit faults.

#### 8U BOWS Grade 3 FP1144

A compact Grade 3 Building Occupant Warning System (BOWS) in a cabinet which matches the 8U/15U MX1 or compact 4100ESi panels. Includes a T-Gen60, 14A PSU, Grade 3 User Interface and microphone. There is space for another T-Gen60, up to 3x100V Splitter/Switching modules and 2x 17Ah batteries.

#### 15U BOWS Grade 3 FP1134

Designed for larger buildings, the 15U Grade 3 BOWS is complete with a T-Gen120, 14A PSU, Grade 3 User Interface and microphone, mounted in a 15U

rack cabinet. Space for 2x 40Ah batteries, additional T-Gen120, and up to 8 x 100V Switching or 100V Splitter modules.

### 15U EWS Grade 2 FP1129

Supplied as a 4-zone Grade 2 EWS in a 15U cabinet with T-Gen120, 14A PSU, 1x 100V Splitter Module and 4-zone User Interface.

Expandable to 20-zones with 16-zone Extender, 8-zone Expansion Board, additional T-Gen2, Switching Modules, etc. Space for 2x 40Ah batteries.

## **Specifications**

FP1115 FP1116 Weight 0.65kg 1.5kg Dimensions (mm) 125x195x110 125x195x55 Supply Voltage 19.2Vmin to 28.8Vmax Operating Temperature -5°C to +45°C Relative Humidity 0 to 95% non-condensing Storage Temperature -20°C to +70°C Quiescent Current 45mA1 to 170mA2 Op. Current 27Vdc<sup>5</sup> 3.0A @ 60W 6.0A @ 120W Line Voltage

- AC (Tones) 100VAC rms (tones) - DC (Supervision) 2.5Vdc (56k ELD 5.0V (O/C) Line Power Tones/Audio Maximum Line Capacitance 200nF

Audio Frequency Range

+/- 1dB 260Hz - 3800Hz +/- 3dB 215Hz - 8400Hz

Audio Performance SNR >75dB(A) THD

< 0.25% 100V Speaker Line Supervision ELD - 1 Branch 56k 0.4W

- 2 Branches 100k 0.4W Strobe Output

1x10k to 3x27k 0.4W ELD 1 to 3 branches Max 2.0A Current Rating

Audio Inputs 250mV rms (min) into 5k Ohm<sup>3</sup> Audio 1 & Audio 2 Microphone Input Level 3mV rms to 100mV rms<sup>4</sup>

**Digital Inputs** Input Supervision 2k7 EOL, <3.5V Active

Open Collector Outputs <1V @ 100mA max., 30Vdc Output Voltage Fault Relay Change-over, 2A @ 30Vdc

Interfaces OLED, 4 button menu structured

Master/Slave, User I/F, PSE QBus Slave comms 100V Switching Module

On-board Storage 4MB (config. & audio) 32GB max. FAT32 support MicroSD Card Headphone Output (internal)

- Load impedance 8 Ohm (min) 6mW 1.30V rms - Output Level ActivFire Listed afp-3315 FPANZ Listed VF/424

1. Power Save Mode (audio off)

- 2. Audio idle
- 3. Isolated, for full power
- 4. PTT driven, optionally supervised
- 5. Excludes strobe current



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