

T-Gen2

Building Occupant Warning Systems - Grade 3

Features

- Complete BOWS - T-Gen2, User Interface, PSU
- 60W or 120W D-class amplifier variants
- 19in Rack cabinet format - 8U, 15U
- Built-in PSU - 14A
- Emergency PA microphone
- 2 Audio line inputs
- 6 General purpose inputs and 4 O/C outputs
- Strobe output
- Programmable site-specific configuration
- Downloadable tones / messages
- Additional storage via microSD card
- Two user-programmable buttons for signal generation
- Expandable power output with Slave T-Gen2 units
- Compliant with AS 4428.16

The VIGILANT T-Gen2 BOWS is a self-contained Grade 3 Building Occupant Warning System (BOWS) with a supervised 100V speaker line and digitised speech messages.

With an integral power supply and PA microphone, it can connect directly to a fire alarm panel, but can also be used as a stand-alone unit.

It is available in two standard configurations: 8U with 60W audio output for smaller buildings (easily expanded to 2 x 60W outputs); 15U with a 120W audio output (easily expanded with additional 60W or 120W output).

Each support a number of optional 100V Switching or 100V Splitter Modules to provide multiple protected outputs, plus additional T-Gen2 units and power supplies can be added in expansion cabinets for a large system.



When coupled with a modern fire detection and alarm system, such as the VIGILANT *MX1*, the VIGILANT BOWS becomes an integral part of your building's fire detection and life safety infrastructure.

For emergency situations the T-Gen2 BOWS supports stand-alone operation with automatic change-over from the alert tone and spoken message, to the evacuate tone and a different message. Operator controlled speech push button and an in-built microphone are used for making emergency public address announcements.

An optional High Level Link (HLI) module allows connection to the RZDU output of VIGILANT *MX1*, *MX4428* and *F3200* fire panels, or the internal 4100Comms on the SIMPLEX 4100ESi to receive zone alarm information and return fault states.

For everyday use it provides two audio inputs (e.g. background music, paging), area-selectable paging options using the in-built microphone and 4 front panel switches for area selection, or a remote 4-zone paging console with integrated microphone, both using

the optional 100V Switching module(s) to direct the paging announcement to different areas; and up to 6 control inputs for external sources such as external paging, LAN connected audio-over-IP announcement, etc.

Operation

The BOWS is controlled by the programmable configuration held within the T-Gen2. The factory-programmed configuration supports the default hardware arrangement, and the PC software SmartConfig allows a specific configuration to be prepared to match the installed arrangement (paging, slave T-Gens, etc). The flexibility provided allows virtually any application to be implemented.

Master/Slave

For higher power outputs, additional T-Gen2 modules may be added configured as slaves. These deliver the amplified master signal to another supervised speaker output, plus provide a second strobe output.

4-Way 100V Switching Module FP1117

This optional module splits the T-Gen2's 100V speaker output into four 100V speaker circuits, each with its own supervision. Each output can 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 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. If a short circuit fault is detected, the 100V Splitter module disconnects that output, allowing the others to continue working. No control of the outputs is otherwise possible. A fault condition is signalled to the T-Gen2 via the 100V line.

Specifications

	FP1144 (8U)	FP1134 (15U)
Weight	17kg	20kg
Size (HWD)	550x440x210	750x550x211
Supply Voltage	19.2V to 28.8V	
PSU Capacity	14A Peak	
Battery Space	2x17Ah	2x40Ah
Operating Temp.	-5°C to +45°C	
Relative Humidity	0 to 95% non-cond.	
Storage Temp.	-20°C to +70°C	
Quiescent Current	290mA ¹	
Op.Current@27Vdc ⁴	3.1A @ 60W	6.1A @ 120W
Line Voltage AC	100V rms	
- DC (Supervision)	2.5V (56k ELD 5.0V (O/C)	
Line Power-Tones	60W rms	120W rms
- Audio	60W rms	120W rms
Maximum line cap.	200nF	
Audio Performance		
SNR	>75 dB(A)	
THD	<0.25%	
Freq. range +/- 1dB	260Hz - 3800Hz	
Freq. range +/- 3dB	215Hz - 8400Hz	
100V Speaker Line Supervision		
ELD - 1 Branch	56k 0.4W	
- 2 Branches	100k 0.4W	
Strobe Output		
ELD - 1 to 3 branch	1x10k - 3x27k 0.4W	
Current rating	Max 2.0A	
Audio Inputs 1 & 2	230mVrms (min) into 5kOhm ²	
Mic. Input Level	3mV rms to 100mV rms ³	
Digital Inputs	2k7k EOL, <3.5V Active	
Open Collector O/P	<1V @ 100mA, 30Vdc	
Fault Relay	Change-over, 2A @ 30Vdc	
Interfaces	OLED, 4 button menu	
Master/Slave	Up to 9 slaves	
On-board Storage	4MB (configuration and audio files)	
MicroSD Card	32GB max size FAT32 support	
Headphone Output (internal)		
Load impedance	8 Ohm min 6mW	
Output Level	1.30V rms	
ActivFire Listed	afp-3315	
FPANZ Listed	VF/429	VF/430

Notes.

1. Audio idle
2. Isolated, for full power
3. PTT driven, monitored
4. Excludes strobe current



Australia Level 3, 95 Coventry Street Southbank VIC 3006 Tel: 1300 725 688 Tel: +61 3 9313 9700 Email: fdp.customerservice.anz@jci.com
New Zealand 17 Mary Muller Drive Hillsborough PO Box 19-545 Woolston Christchurch 8241 Tel: +64 9 635 0617 Email: tsp.sales.nz@tycoint.com

VIGILANT, a respected regional brand of Johnson Controls, is a technology leader in the Australian and New Zealand fire detection markets with AS and NZS product approvals. The VIGILANT product line includes a comprehensive range of MX TECHNOLOGY fire detection products and the market-leading QE90 voice evacuation systems. VIGILANT product is widely supported throughout Australia and New Zealand by a network of installation companies, service companies and distributors.

© 2018 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.

T-Gen2BOWSVIG1810 October 2018

www.vigilant-fire.com.au