FEDERAL SIGNAL

▶ Model PAGASYS GEN II

Digital Public Address and General Alarm Systems with Networked Options

PAGASYS® GEN II is a robust public address and general alarm platform for use in a variety of environments. The New PAGASYS GEN II will take technology to the next level by offering a user-friendly, comprehensive, real-time system manager interface and a front-access design.

Upgraded NEW Features
In addition to providing the same legacy features the Federal Signal PAGASYS is known for, the PAGASYS GEN II system includes multi-voice audio routing (6 voices), alarm audio "ducking" for clear voice communication, and integrated digital signal processing. Standard configurations and front access to the system hardware lead to reduced complexity and ease of maintenance.

Pagasys GEN II allows a user to manage system operation from the centralized system manager with extensive software field diagnostics for system hardware, ISMT speakers, and beacon monitoring; as well as other aspects of the system.
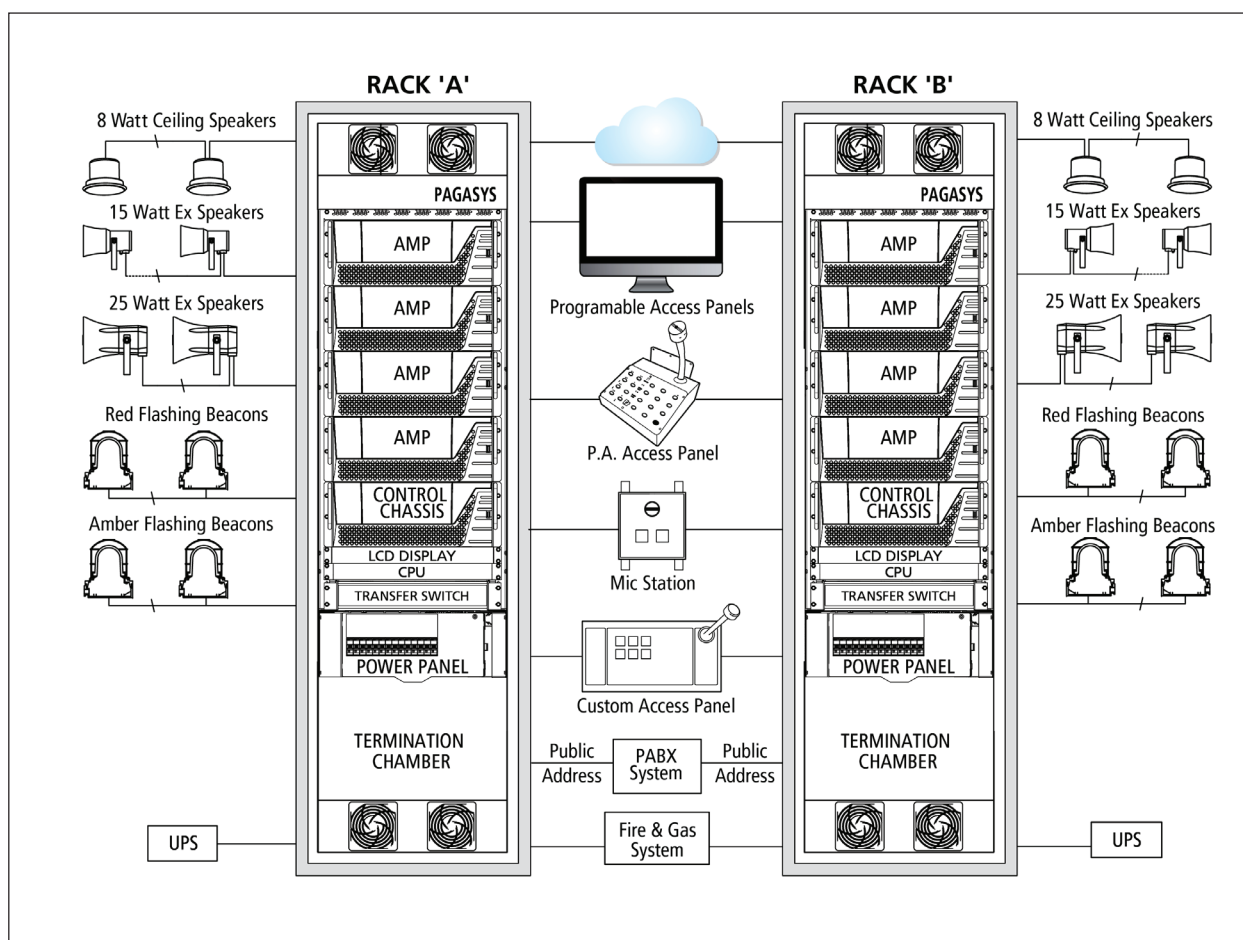
New Technology Offers Cost Savings
PAGASYS GEN II has been redesigned to utilize innovative technology, while reducing cost of the system at purchase and maintenance. A high-performance processor and memory solution, along with integrated digital signal processing (DSP), supports up to 32 amplifier chassis (38400 Watts of audio power) per processor and monitors and drives an extensive network of speakers, beacons, and other safety equipment and peripherals.

FEATURES

- System manager provides real-time system status, including event logs, system activity, broadcast status, impedance speaker monitoring, fan flow and amplifier thermal status

- Supports multi-voice audio, driving up to 6 voices concurrently to up to 128 zones

- DSP-based Audio

- Up to 32 access panels per system

- Supports Intelligent Speaker Monitoring and Tapping (ISMT)

- Fully configurable broadcast priority

- Front rack access for ease of maintenance

- Native PABX interface

- Up to 32 speakers per loop (with ISMT)

- Alarm audio "ducking" for clear voice communication

- A single controller can support up to 32 1200W amplifier chassis

- Up to 128 zones

- Up to 32 external audio inputs

- Up to 128 recorded messages

- Up to 128 peripheral devices

- Supports up to 32 external access panels

- Native support redundancy A-B

- DNV Type Approved and CE Certified as a Public Address and General Alarm System, using the standards DNVGL-CG-0339, the relevant parts of IEC60945 Ed. 4 for protected equipment, and EN 61000-3-2:2006, EN 61000-3-3:1995, EN 55103-2:2009 (PENDING)

Digital Public Address And General Alarm Systems (PAGASYS GEN II)

RACK 'A' | **RACK 'B'**

Labels around diagram: 8 Watt Ceiling Speakers, 15 Watt Ex Speakers, 25 Watt Ex Speakers, Red Flashing Beacons, Amber Flashing Beacons, UPS, PAGASYS, AMP, CONTROL CHASSIS, LCD DISPLAY, CPU, TRANSFER SWITCH, POWER PANEL, TERMINATION CHAMBER, Programable Access Panels, P.A. Access Panel, Mic Station, Custom Access Panel, Public Address, PABX System, Fire & Gas System, 8 Watt Ceiling Speakers, 15 Watt Ex Speakers, 25 Watt Ex Speakers, Red Flashing Beacons, Amber Flashing Beacons, UPS

SPECIFICATIONS

Operating Temperature:	-10°C to +55°C
Storage Temperature:	-55°C to +75°C
AC Input Voltage:	85 - 264VAC 50/60Hz
Cabinet size (DxWxH):	800mm x 600mm x 2000mm (31.50" x 23.62″ x 78.74")
Cabinet Model	Rittal TS8, Color RAL 7035
Cabinet Plinth Size	800mm x 600mm x 100mm (31.50" x 23.62″ x 3.94")
Wire Termination Access:	Front Access
Audio Voices (Simultaneous):	6
Line Level Supported:	70V/100V
Access Panel Wiring:	Standard 4-pair cables, including off the shelf CAT5/6/7

Amplifier Specifications

Amplifier Chassis Size:	19" 4U Chassis
Single Amplifier Power:	300W
Channels per Chassis:	4
Amplifier Chassis per Cabinet:	5 max, 4 with controller
Amplifier Continuous Duty Rating:	Rated for >1 hour 300W continuous duty at 55°C
Total Harmonic Distortion:	<0.2% at 1KHz using full rated output power (300W)
Max Watts per Amplifier Chassis:	300W - 1200W (1-4 300W amplifiers)

ISMT Specifications

Max Speakers per Loop:	32

Select cabinet model needed from Table 1. The standard cabinet models P-SYS-G-CNTL-2KW and P-SYS-G-CNTL-4KW come with standard configuration defined in Table 2, and I/O and Terminal Block cards marked as Standard in Table 4. The auxiliary cabinet (Model P-SYS-G-AMPS-5KW) does not include wiring for a controller chassis, and will need extended length wiring to connect amplifiers in the cabinet to an external control cabinet.

The standard cabinet models do not include a server for the PAGASYS GEN II System Manager, or a transfer switch. If these items are desired, order model P-SERV-G for the server and/or P-TRANS-SW-G for the transfer switch (see table 5). If not ordering a System Manager server, the System Manager software may be ordered separately as model P-SYSMGR-G.

Next, select the number and type of amplifier chassis models needed in the cabinet from Table 3. Model P-SYS-G-CNTL-2KW standard cabinet will only support 1 or 2 amplifier chassis, the Model P-SYS-G-CNTL-4KW standard cabinet can support up to 4 amplifier chassis, and the Model P-SYS-G-CNTL-5KW auxiliary cabinet can support up to 5 amplifier chassis.

The Controller chassis that is included with the standard cabinet models comes with a standard set of control cards, including the processor card, an internal AP MUX card, an AMP audio MUX card, a Miscellaneous card (the Miscellaneous card provides an ISMT GUI interface, a telephone/PABX interface, a serial port, local microphone port, and auxiliary audio input.), an I/O interface card, and a power supply card. The fully populated control chassis has one slot that is not populated; a second internal AP MUX card or an external AP MUX card can be purchased as an option for the extra slot.

The different models of amplifier chassis in table 3 come with 1, 2, 3, or 4 300W amplifier cards, reflected by the different model numbers. If ISMT is required, the appropriate number of ISMT cards will need to be ordered. *Note: when using an ISMT card in an amplifier chassis, there must be an amplifier card in slot 4 of the amplifier chassis. The amplifier card in slot 4 will automatically become the standby for the protected group of amplifiers.*

Finally, select the I/O and Terminal Block cards needed from Table 4. Standard PAGASYS GEN II cabinet models (P-SYS-G-CNTL-2KW and P-SYS-G-CNTL-4KW) will already include the I/O and Terminal Block cards reflected as "Standard" in Table 4. There are limitations to the number and location of the I/O and Terminal Block cards in the cabinet.

Cabinet Model (Table 1)

CABINET MODELS	DESCRIPTION
P-SYS-G-CNTL-2KW-*	PAGASYS GEN II cabinet wired for 2 amplifier chassis with standard I/O cards
P-SYS-G-CNTL-4KW-240	PAGASYS GEN II cabinet wired for 4 amplifier chassis with standard I/O cards
P-SYS-G-AMPS-5KW-*	Aux PAGASYS GEN II cabinet wired for 5 amplifier chassis no controller, with AMP audio distribution card 1:2

* Add -120 or -240 at the end of the part number for 120VAC or 240VAC

Standard Configuration (Table 2)

STANDARD CABINET CONFIGURATION
800 mm x 600 mm x 2000 mm rack with glass door
Cooling fans
Rear, Audio, AC power I/O assemblies
Breaker panel
Power distribution panel
Controller chassis wiring, slide assemblies, and fully populated Controller chassis
Amplifier chassis wiring and slide assemblies (Amplifier chassis purchased separately)
Handheld Microphone
Wiring ducts and wiring
Standard I/O and Terminal Block cards (see table 4 below)

Chassis Models (Table 3)

CHASSIS MODELS	DESCRIPTION
P-A250-G	PAGASYS GEN II Amplifier chassis with one Amplifier card
P-A500-G	PAGASYS GEN II Amplifier chassis with two Amplifier cards
P-A750-G	PAGASYS GEN II Amplifier chassis with three Amplifier cards
P-A1000-G	PAGASYS GEN II Amplifier chassis with four Amplifier cards
P-A250-G-70	PAGASYS Gen II Amplifier chassis with one 70V Amplifier card
P-A500-G-70	PAGASYS Gen II Amplifier chassis with two 70V Amplifier cards
P-A750-G-70	PAGASYS Gen II Amplifier chassis with three 70V Amplifier cards
P-A1000-G-70	PAGASYS Gen II Amplifier chassis with four 70V Amplifier cards
P-ISMT-G	ISMT card (maximum one per Amplifier chassis)

I/O and Terminal Block Models (Table 4)

I/O & TERMINATION BLOCK MODELS	DESCRIPTION	INCLUDED WITH STANDARD MODEL OR OPTIONAL
P-16DIN-G	Input Card (1 each in standard model, 16 inputs)	Standard
P-BK-MON-G	Beacon Monitoring Card (1 each in standard model, 2 beacon loops)	Standard
P-SPDT-G	I/O Relay Output Card (2 each in standard model, 12 relay outputs)	Standard
P-FCMC-G	I/O Fan Control/Monitoring Card (1 each in standard model)	Standard
P-AADC2-G	AMP Audio Distribution Card 1:2 (1 per wired amplifier)	Standard
P-FWTC-G	Fan Wiring Termination Card (2 each in standard model)	Standard
P-APIC-G	I/O Access Panel Aggregator Card	Optional
P-MONIC-G	I/O Monitored Input Card (16 inputs)	Optional
P-PTBC-G	Passive Terminal Block Card (2 each in standared model)	Standard
P-CPIC-G	I/O Cable Power Injector Card	Optional
P-AADC1-G	AMP Audio Distribution Card 1:1	Optional
P-AADC4-G	AMP Audio Distribution Card 1:4	Optional
P-AADC8-G	AMP Audio Distribution Card 1:8	Optional
P-EAMC-G	External Access Panel MUX Card	Optional
P-ISB-G	IS Barrier Card (2 access panels for each barrier card)	Optional
P-SYSMGR-G	PAGASYS GEN II System Manager Software	

Federal Signal will offer PAGASYS GEN II Kits for customers that want to build their own enclosures and assemble the systems. Order P-NET-G-KIT, control chassis with standard cards and mounting hardware. Order desired number of amplifier chassis, populated with 1-4 amplifier cards. Purchase ISMT cards, I/O and Terminal Block cards as needed. A wiring kit and metal-work kit are also being offered. The wiring kit provides extended length wires to connect to PAGASYS GEN II controller and amplifiers with remote ends left un-terminated. The 1U Server and Transfer Switch kits should be ordered for any system requiring a server and/or transfer switch in the cabinet, as they are not included with the standard cabinet models.

PAGASYS GEN II Kits (Table 5)

MODEL	DESCRIPTION
P-SYS-G-MW-KIT-2KW	PAGASYS Gen II Metalwork kit 2KW
P-SYS-G-MW-KIT-4KW	PAGASYS Gen II Metalwork kit 4KW
P-SYS-G-MW-KIT-5-CH	PAGASYS Gen II Metalwork kit 5 Chassis
P-SYS-G-WIRE-KIT-5-CH	PAGASYS Gen II Wiring kit 5 Chassis
P-SYS-G-WIRE-KIT-2KW	PAGASYS Gen II Wiring kit 2KW
P-SYS-G-WIRE-KIT-4KW	PAGASYS Gen II Wiring kit 4KW
PK-NET-G	Controller chassis with standard controller PCB cards
PK-A250-G	Amplifier chassis with backplane cards, one 100V amplifier PCB, no ISMT
PK-A500-G	Amplifier chassis with backplane cards, two 100V amplifier PCBs
PK-A750-G	Amplifier chassis with backplane cards, three 100V amplifier PCBs
PK-A1000-G	Amplifier chassis with backplane cards, four 100V amplifier PCBs
PK-A250-G-70	Amplifier chassis with backplane cards, one 70V amplifier PCB
PK-A500-G-70	Amplifier chassis with backplane cards, two 70V amplifier PCBs
PK-A750-G-70	Amplifier chassis with backplane cards, three 70V amplifier PCBs
PK-A1000-G-70	Amplifier chassis with backplane cards, four 70V amplifier PCBs
PK-ISMT-G	ISMT line card
PK-IOCARD-G-2KW	Kit that contains standard I/O cards for a two amplifier chassis system
PK-IOCARD-G-4KW	Kit that contains standard I/O cards for a four amplifier chassis system
PK-IOCARD-G-5KW	Kit that contains standard I/O cards for a five amplifier chassis system

*No controller chassis