



P-A250

250 W Class-D Amplifier Module
for use with PAGASYS systems.



Features

- Class-D Amplification
- 250 Watt
- Designed for Voice and General Alarm application
- Intelligent electronics and visual status indication
- Overload Protection
- Very low heat generation
- Light Weight
- Parallel Banking Capability (increases speaker loop to 500 Watts)

The Model P-A250 Class-D industrial grade audio amplifier is designed to be highly efficient while providing low maintenance and high reliability. With tens of thousands of these amplifiers in use today, the P-A250 is the perfect balance between muscle and intelligence for cost effective public address and general alarm systems (PAGASYS).

The modern design of the P-A250 with its built in thermal protection is housed in an easily replaceable card frame module. The P-A250 can be quickly replaced without the need to disconnect wires or having to gain rear access. Additionally, the light weight properties of the P-A250 allows for efficient maintenance in remote or confined spaces.

The Model P-A250's intelligent self test capability allows for verification of performance in hot stand-by and fully redundant systems. In addition, the P-A250 is compatible with Federal Signals Intelligent Speaker Monitoring and Tapping (ISMT) and networked managed systems. Automatic sleep mode, overload protection, visual status indication, and parallel banking increasing speaker loops to 500Watts are amongst many of the P-A250's features.

Architects' and Engineers' Specification

250Watt Class-D cardframe amplifier with selectable frequency response and sleep mode. Incorporates LEDs to indicate: output level, 100V line access status, amplifier failures, input overload and overheating. Optically isolated outputs to report on amplifier failure, input signal status and power supply status. Designed for nominal 27VDC power supply. Fit standard 3U mainframes.

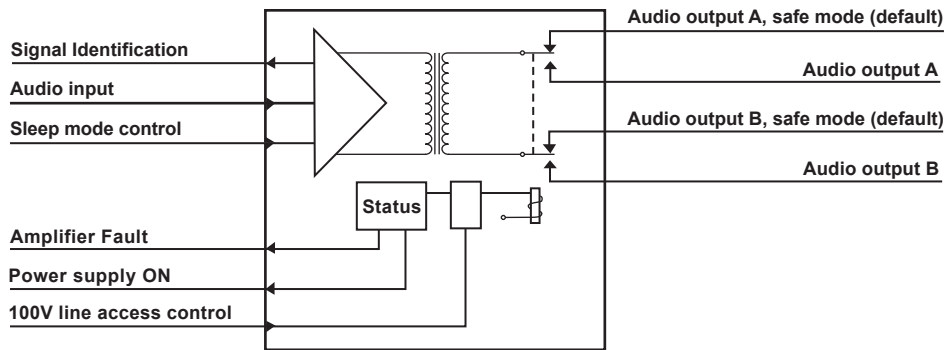


tel: UK +44-(0)1625-666600
USA +1-877-289-3246
www.fs-isys.com

 **FEDERAL SIGNAL**
Safety and Security Systems / Industrial

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P-A250 DIAGRAM



GENERAL SPECIFICATIONS

Rated output power (rms)	100V circuit	250W
Power supply		27VDC
Current supply (@27VDC)	Sleep mode/Full power	60mA / 12.25A
Efficiency	Full power	Higher than 84%
Frequency response (@ 25V rms out)	Mode 1	-3dB points at 50Hz and 19kHz - passband with 1dB
(selectable with on-board jumper)	Mode 2	-3dB points at 180Hz and 22kHz - passband within 1.5dB
HF roll off load dependant		
Input common mode rejection ratio		Higher than 50dB (50Hz - 18kHz)
Residual noise	Sleep mode/Full power	-95dB / -70dB (audible)
Input sensitivity		0.775V (rms)
Total Harmonic Distortion (THD) @ 27 Vdc		Less than 1% (at 10Vrms, 1kHz, with a 40 ohm load)
		Less than 4% at rated output
Electronic Status Report (opto-isolated outputs 3mA current sink)	Signal Identifications	Reports presence of input signal
	Amplifier failure	Output from fault comparator -resolution set to 1Vrms out
	Power supply	Report presence of 27V power supply
Amplifier controls (opto-isolated)	100V line access	Line Access selected with 27V @ 3mA
	Sleep mode control	Sleep mode activated with 27V @ 3mA
Output Stage protection	thermal	Heatsinks above 90°C, resets to normal at 80°C
	Short Circuit	100V Line electronically de-accessed
Overload protection	Short term overload	Current limiting
	Long term overload	Current trip for 5 seconds
Amplifier status LEDs	Output level	10 LEDs, from 10 to 100%
	Access	100V line selected
	Select	Amplifier is awake (active de-select)
	Cut-out	Amplifier is forced into sleep mode for 2 possible reasons: High temperature or Long term overload
	Hi-Temp	When temperature reaches 90°C
	Overload	Input signal higher than 850mV (with full load)
Operating temperature range		-10°C to +50°C
Weight (kg)	Net/Packed	3.04 / 3.32
Dimensions	H x W x D	128mm x 80mm x 362mm (standard 3U rack mounting)

CE compliance is met when products are used in accordance with the relevant user guide.

In the interests of product improvement we reserve the right to change specification or design without prior notice.

UK - Federal Signal Corporation, Integrated Systems
Hulley Road, Hurdsfield Industrial Estate,
Macclesfield, Cheshire SK10 2NF, UK
tel: +44 (0)1625 66 66 00 fax: +44 (0) 1625 611 352
web: www.fs-isys.com email: systems@fedsig.co.uk

USA - Federal Signal Corporation, Integrated Systems
2645 Federal Signal Drive, University Park, IL 60466, USA
tel: +1 708-534-4723 fax: +1 708-534-4887
web: www.fs-isys.com email: systems@fedsig.com