

Model P-A250

250W Class-D Amplifier Module

For use with PAGASYS systems



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 500 Watt are amongst many of the P-A250's features.

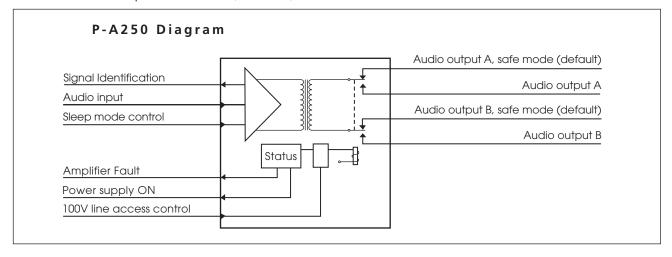
Architects' and Engineers Specification

250 Watt 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. Fits standard 3U mainframes.

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)

250W Class-D Amplifier Module (P-A250)



S P E C I F I C A T I O N S

Rated output power (rms) 100V circuit 250W
Power Supply 27VDC

Current supply (@27VDC)

Efficiency

Full power

Full power

Frequency response (@ 25V rms out)

(selectable with on-board jumper)

Sleep mode/ Full power

Full power

Mode 1

-3dB points at 50Hz 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 Signal Identifications Reports presence of input signal (opto-isolated outputs Amplifier failure Output from fault comparator- resolution set to 1Vrms out

3mA current sink)Power supplyReport presence of 27V power supplyAmplifier controls100V line accessLine Access selected with 27V @ 3mA

(opto-isolated) 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)
perating temperature range -10°c to +50°c

Operating temperature range -10° c to $+50^{\circ}$ c Weight (kg) Net/Packed 3.04 / 3.32

Dimensions H x W x D 128mm x 80mm x 362mm (standard 3U rack mounting)

HOW TO ORDE

Specify Model:

P-A250 – 250W Class-D Amplifier Module

If ordering as a replacement part, specify part – K-P-A250

C 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.