

CLASS D AUDIO POWER AMPLIFIER



D600i, dual 300W channels for Elemecplus PA/GA System



At the heart of all GAI-Tronics Public Address Systems is the D600i Class D Power Amplifier (2x300W). The D600i is designed for use in GAI-Tronics high integrity Elemec, NOVA and Advance public address and alarm systems.

GAI-Tronics designs and manufactures sophisticated public address and alarm systems to suit specific markets and applications. The NOVA system addresses multiple zones, multiple networks and multiple speech path applications such as large petrochemical facilities. Elemecplus addresses self-contained applications such as platforms and FPSOs. ADVANCE combines public address with multi-station intercom capability.

The field proven D600i amplifier is designed for performance in a range of applications, from continuous 300W RMS rated outputs for Alarm Systems to high quality music reproduction. Each amplifier comprises 2 x 300W channels, each capable of independent operation.

To reduce the risk of single point failure on AC systems, the Amplifier has its own internal rectified DC power supply.

Fault protection and ultrasonic load sensing are contained within the Amplifier. Load sensing is easily configured by use of pushbuttons on the front of each amplifier. This load sensing facility allows loudspeaker monitoring and automatically detects changes in the load of the connected loudspeakers.

- Efficiency 80% (240VAC 100V Line)
- LCD Status Indication
- Comprehensive fault monitoring
- User-friendly Set up & Commissioning
- Class D Operation
- Dual Channel (300W per) split amp
- 600W 2U Modular Design

Thermostatically controlled fans, integral to each unit, provide forced air cooling to the output power devices only during high temperature operation.

System expansion is easily achieved by simply adding more amplifiers without the need to change controller hardware.



Class D Audio Power Amplifier - Technical Specifications

Specifications

LCD Indicator Panel on the front of the amplifier displays the following information:

- High Temperature Operation
- Output Overload Condition
- Amplifier Shutdown Protection Active
- Power Healthy
- Amplifier Enabled / Disabled
- Fuse Failure
- Zone Allocation
- Bargraph at output level

Electrical

- **Output power:** 2x300W
- **Line output voltage:** 70V or 100V rms (or client spec)
- **Input sensitivity:** 0dBm (0.775V rms) for rated output
- **Frequency response:** 50Hz - 18kHz (-3dB points)
- **Total harmonic distortion:** <2% at 1kHz, full load
- **Signal to Noise ratio:** 60dB (A)
- **Operating Voltage Options:** 48V DC, Mains 120V or 230V AC
- **Operating Temperature:** -20°C to +50°C
- **Efficiency:** 80% (typ)

Mechanical

- **Mounting:** 19" Standard Rack (Shelf or Slider)
- **Material:** Welded Steel Tray with Vented Lid
- **Finish:** Black Textured Stoved Enamel
- **Output Audio Connectors:** WAGO 5 way connector
- **AC Power:** IEEE Standard, 3 pin
- **DC Power:** Molex 2 way 100mm Mini Fit connector
- **Audio / Data Comms (RS485):** IDC
- **Weight:** 24Kg max

Power Consumption in Full Power Mode

- 230V = 3.18A Consumption 731.0 Watts
- 120V = 6.57A Consumption 788.0 Watts
- 48V = 17.01A Consumption 817.0 Watts

Power Consumption in Idle Mode

- 230V = 150mA Consumption 34.5 Watts
- 120V = 300mA Consumption 36.0 Watts
- 48V = 600mA Consumption 28.8 Watts

Dimensions

- 390D x 483W x 88Hmm, DIN standard 2U



Approvals



This mark indicates compliance with the following directives:

Radio & Telecommunications Terminal Equipment Directive 1999/5/EC (R&TTE)

Order Information

For order codes and details, please contact:

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