

MODEL: PSA-500D

500W CLASS-D POWER AMPLIFIER



PRODUCT OVERVIEW

The PSA-500D is a **500W Class-D amplifier** engineered for continuous duty operation. Its thermally efficient design minimizes heat, improving reliability in 24×7 environments.

KEY BENEFITS

- **500W Class-D efficiency** - reduces heat generation and power consumption.
- **Current-sensing load protection** - isolates faulty wiring and speakers.
- **Voltage limiter** - prevents clipping and protects audio fidelity.
- **Speaker protection circuitry** - prevents damage from wiring faults or surges.
- **Thermal and overload safeguards** - ensures uninterrupted operation.
- **100V line output** - maintains consistent audio over long cable runs.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Input Voltage	230 VAC \pm 10% at 50/60 Hz
Inrush Current	7 A @ 230 VAC
Protection	Audio input level limiter, high temperature, DC, short circuit, mains undervoltage protection, inrush current limiter, ground fault
Rated Output (RMS)	500 W
Frequency Response	20 Hz - 20 kHz (+1 / -3 dB at -10 dB ref.)
Total Harmonic Distortion (THD)	<0.5% at rated output, 1 kHz
Signal-to-Noise Ratio	>90 dB (flat, max volume)
Efficiency	~90%
Output Stage Topology	Class-D, floating
Crosstalk ref. 1 kHz	< -85 dB
Connector	3-pin XLR, balanced
Sensitivity	2 V RMS
Impedance	>20 k Ω
CMRR	>25 dB (20 Hz-20 kHz)
Gain	40 dB
Input level, max	+18 dBu
Connector	Screw terminal, Unbalanced
Sensitivity	100 V
Impedance	330 k Ω
Connector	Screw terminal, floating
Direct Output	100 V / 20 Ω
Dimensions (HxWxD)	145 x 432 x 370 mm
Weight	~5 kg
Color	Black
Mounting	19" Rack, 1U Height
Operating Temperature	-10 $^{\circ}$ C to +55 $^{\circ}$ C
Storage Temperature	-40 $^{\circ}$ C to +70 $^{\circ}$ C
Relative Humidity	<90% (non-condensing)
Fan Noise	<48 dB SPL @ 1 m (max output)
Certifications	CE, FCC & EN54

The design and specifications are subject to change without notice. The latest product information can be found at www.triobrics.com