Datasheet

PAS-NA500 | Network Amplifier 500 Watt



Key features

- Built-in 500W Class-D amplifier with 100V speaker drive and line output.
- SIP-compatible IP amplifier for offline broadcasting and live announcements via VoIP/PA software.
- Audio Enhancer & Decoder: Boosts and processes sound.
- Full protection: over-current, short-circuit, overload, thermal, lightning, and surge.
- Relay I/O for third-party integration with auto alarm tone from pre-uploaded FTP files.
- Web/config tool with status indicators for power, network, signal, clip, and protection.
- Secure Operation: Protected against unauthorized use.
- Intelligent forced-air cooling in compact 1U rackmount design.

Product Overview

The Macsys PAS-NA500 is a 500W IP integrated Class D amplifier in a compact 1U rack design, delivering high-quality audio with low distortion and excellent SNR. It supports balanced/unbalanced line inputs, MIC, AUX1/2, AUX output, dual RCA line output, and 100V speaker outputs for flexible setups.

SIP compatibility enables integration with VoIP systems and Macsys software, supporting live paging, cross-network access, and offline broadcasting via built-in storage with FTP-uploaded files. Relay I/O allows fire alarm and third-party integration with auto-alarm playback.

The amplifier ensures reliable operation with protections against over-voltage, overload, overheating, short-circuit, lightning, and surges, plus intelligent cooling with forced air. Configurable via web interface or Config Tool, it offers wide AC 100–240V operation, hidden volume control, and front-panel status indicators—making it ideal for professional PA and emergency broadcast applications.

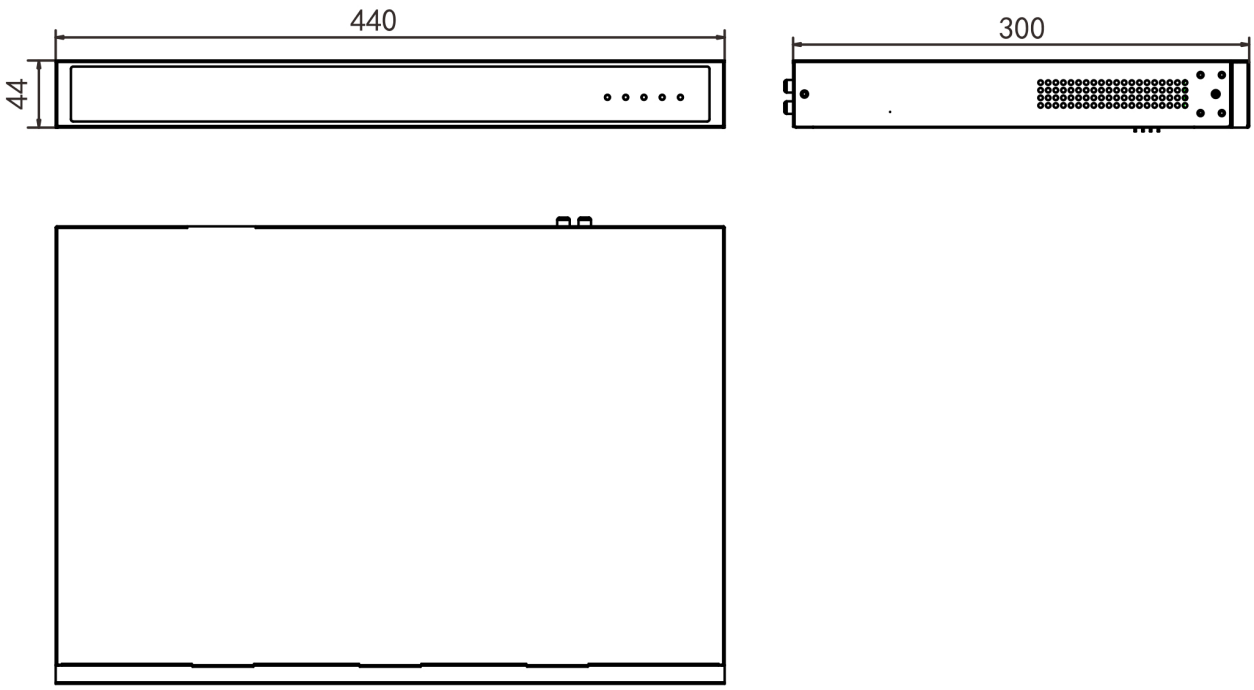
Techinical Specification

Featues	Detail
Design	Compact 1U rack design, flexible and durable
Amplifier type/output	Built-in digital Class-D 500W amplifier suitable for 100V powered loudspeakers
Front indicators	POWER (red on when powered), STATUS (green on online, red on offline), SIGNAL (green on with input), CLIP (red on when overloaded), PROTECT (yellow on when malfunctioning)
SIP integration	SIP protocol compatibility with mainstream VoIP systems
Offline operation	Supports offline broadcasting independently of a server
Live announcements	Receives live voice announcements from third-party VoIP systems or Macsys centralized management software
Relay interfaces	Relay I/O port for connecting with third-party fire alarm systems
Protection suite	Over-Current, Short-Circuit, Overload, Thermal, Lightning, Surge Protection
Storage	Large-capacity storage for uploading and remotely updating timed tasks and alarm files
Power supply	AC 100V-240V, 50/60Hz
Rated output	500W
Power consumption	≤580W
Audio codecs	MP3, PCM, ADPCM, G.711 A-law, G.711 μ-law, G.729
S/N ratio	≥84dB
Sampling/bit rate	8kHz~44.1kHz, 16bit, 8kbps~320kbps
THD	≤0.5% at 1kHz, 1/2 rated output
Frequency response	60Hz~16kHz
Network interface	10BASE-T/100BASE-TX RJ45
Network protocols	SIP, FTP, HTTP, RTP, TCP/IP, UDP, ARP, ICMP, IGMP
Configuration	Web Interface or Config Tool
Back panel controls	MUTE depth adjustment knob; MIC volume knob; AUX1/2 volume knob
Mic input	1/4-inch (6.35mm) TRS Jack (Unbalanced, Sensitivity/Impedance: 100mV/600Ω)
Aux input 01	3-Pin pluggable terminal block (3.81mm Pitch, AWG 26-16) (Balanced, Sensitivity/Impedance: 500mV/10kΩ)
Aux input 02	Dual RCA Jacks (Unbalanced, Sensitivity/Impedance: 500mV/10kΩ)
Aux output	Dual RCA Jacks
Speaker outputs	2-Pin Pluggable Terminal Block (7.62mm Pitch, AWG 28-12), Speaker Output 01/02 (100V)

Technical Specification

Feature	Details
Network port	To connect to Ethernet switch
USB port	Reserved
DC 24V power relay output	2-Pin pluggable terminal block (3.81mm Pitch, AWG 26-16), normally open (NO) dry contact with DC 24V power output
Relay output	3-Pin pluggable terminal block (3.81mm Pitch, AWG 26-16), NO or NC dry contact
Relay input	2-Pin pluggable terminal block (3.81mm Pitch, AWG 26-16), NO dry contact
Ground, power, fuse	Ground Terminal; Power Switch; Power Input Interface; Insurance Block
Speaker compatibility	100V constant-voltage passive speakers; 4Ω/8Ω constant resistance speakers (shown in diagram)
Cooling	Intelligent Temperature Control, Forced Air Cooling; Cooling Fan
Materials	Surface-Treated Steel Plate (Front Panel and Housing), Black
Heat Dissipation	Intelligent Temperature Control, Forced Air Cooling
Dimensions	440x300x44mm
Weight	3.5KG
Mounting	1U Rack-Mounted
Operating temperature	0°C~+45°C (32°F~113°F)
Operating humidity	≤90% RH non-condensing
Storage temperature	-20°C~+55°C (-4°F~131°F)
Accessories	2×5-Pin Pluggable Terminal Block Connector (3.81mm Pitch,AWG 26-16); 1×4-Pin Pluggable Terminal Block Connector (7.62mm Pitch, AWG 28-12); 8×Flat Head Screw; 4×3M™ Floor Pad; 2×Rack Mounting Bracket; 1×Power Cord
Certification	CE, RoHS Compliance

Dimension



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