

## INCA 500

# 4X125 W @ 4–8 $\Omega$ / 2X250 W @ 70/100V AMPLIFIER, HALF-RACK WIDTH, INTEGRATED DSP

The Inca 500 is a four-channel amplifier in a half-rack width format, designed to deliver maximum installation flexibility for Lo-Z and Hi-Z systems alike. Thanks to its universal power supply with integrated PFC and 1 RU height, it's perfectly suited for AV installations, hospitality, corporate environments, and distributed systems. It can deliver 125 W per channel at low impedance (4–8  $\Omega$ ) or 250 W per channel at 70/100V, making it ideal for mixed or distributed setups.

The Inca 500 features a full matrix DSP, controllable via TCP/IP, offering complete signal processing including EQ, delay, trim, polarity, and optimized presets with FIR filters and limiters. It also supports Master/Slave operation via S/PDIF, allowing multiple units to be digitally linked. Its innovative automatic power sharing function redistributes power dynamically across outputs, maximizing efficiency and adapting to system demands. Compact, efficient, and highly reliable, it's the perfect solution for professional systems where space is at a premium.



70/100V



DSP

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## HIGHLIGHTS

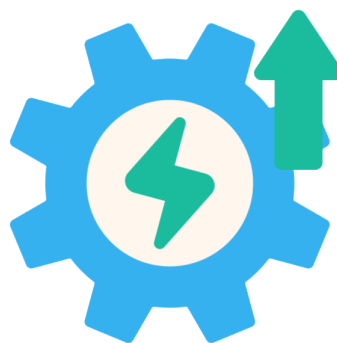


### 4X125 W ON LO-Z OR 2X250 W ON 70/100V, PERFECT FOR LOW AND HIGH IMPEDANCE MIXED SYSTEMS

Thanks to its flexible architecture, the Inca 500 can operate in **Lo-Z mode** (from 4 to 16  $\Omega$ ) with **four 125 W channels**, or in **Hi-Z mode** with **two 250 W channels** at 70 or 100 V. This dual-mode functionality allows a **single device to cover a broad range of system requirements**, from traditional direct-loaded speaker systems to **distributed audio networks typical of commercial, public or hospitality spaces**. The ability to switch between modes ensures **design flexibility**, making the amplifier suitable for hybrid setups or future system expansions.

### AUTOMATIC POWER SHARING TECHNOLOGY, FOR INTELLIGENT REDISTRIBUTION OF OUTPUT POWER

The Inca 500 features a **dynamic power sharing system** that allows up to **250 W to be distributed across each output pair**, automatically reallocating power based on the actual demand of each connected load. This means that in real-world applications—where not all channels require the same output—the amplifier can **optimize resource usage**, reducing energy waste and improving overall system efficiency. This is especially beneficial in **zoned or distributed setups**, where loudspeakers may have **different load characteristics or output needs**.



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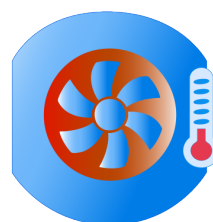


### **PFC (POWER FACTOR CORRECTION) FOR FLAWLESS WORLDWIDE OPERATION**

Highly efficient, microprocessor-controlled power supply with built in PFC (Power Factor Correction) for flawless worldwide operation with any AC mains voltage in the range 85-275 VAC tolerant to peak up to 400 V

### **INTELLIGENT VARIABLE SPEED VENTILATION**

Ventilation is controlled by internal temperature, with front-to-rear airflow for rack mounting.



Fan controlled by  
internal temperature

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## PRODUCT DETAILS

### KEY FEATURES

Half-rack width 1 RU format, ideal for compact and flexible installations

Full matrix DSP with TCP/IP control, including EQ, delay, polarity, and FIR limiters

Comprehensive protection circuitry: thermal, short circuit, overload, undervoltage and DC

Universal PSU with PFC and low consumption, under 0.5 W in standby mode

### SPECIFICATIONS

Number of output channels	4
Number of input channels	6 (4 analogue, 2 digital)
Power rating	500W total system power   4x125W @ 4-8?, 2x125W @ 70/100V   2x250W powershare (up to) across all channels
Output voltage	70Vp / 140Vpp (unloaded)   Bridged 140Vp / 280 Vpp (unloaded)
Frequency Response (8? load, 3dB below rated power)	20Hz-20kHz (+0/-0.25dB)
Signal To Noise-Ratio (A-weighted, 20Hz-20kHz, 8? load)	>106dB
Output Circuitry	UMAC™ Class D - full bandwidth PWM modulator with ultra-low distortion
THD+N (typical)	< 0.05% (20Hz-20kHz, 8? load, 3dB below rated power)
Protection Circuits	Short circuit -, DC -, Undervoltage -, Temperature - and Overload protection
Power supply	UREC™ universal mains switch mode power supply with Power Factor Correction (PFC) and standby converter
Nominal voltage	Universal Mains, 100V-240V, 50Hz-60Hz

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Power Consumption	150W
Standby Consumption	< 0.5W
Operating Temperature	0-40°C
Power Ratings	1% THD @ 120Vac and 230Vac
Dimensions	44 x 220 x 319 mm
Weight	2.8kg (6.2 lbs)