

**Amplifiers** 

## **SmartAmp 20**

4 x 125w amplifier with integral DSP









#### **FEATURES**

- Desktop or rack mounted
- Signal processing presets for Optimal Audio loudspeakers
- 125 watts per channel into  $4\Omega$ -16 $\Omega$  and 70v-100v line loudspeaker loads
- Power sharing technology enables 250 watts from two pairs of channels

SmartAmp 20 is an amplifier with built in Digital Signal Processing (DSP) specifically tailored to optimise the performance of the Optimal Audio loudspeaker range.

This four-channel power amplifier can drive either conventional low impedance or 70V - 100V loudspeaker loads. Internal DSP presets of Optimal Audio loudspeakers are selected by switches to the rear of the amplifier, which enable the appropriate EQ and overload protection settings.

The space efficient half-width, 1U, 19" rack housing enables two units

to be mounted side by side with a SmartAmp 10 or another SmartAmp 20, allowing up to 8 channels in a 1U space.

The SmartAmp 20 is capable of a maximum of 250W output shared between each pair of channels. This enables SmartAmp 20 to flexibly deliver power required for each channel within a pair, depending on the system requirement. For example, if one channel was to only be using 20W of power for some Up speakers, the other channel in the pair could deliver the remaining 230W of power for a more demanding application.

### **APPLICATIONS**



Cafes



Bars/ Restaurants



Retail

Wedding

Venues



Hotels

Education

**Facilities** 



Worship





Offices



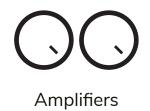
Museums





Fitness Studios

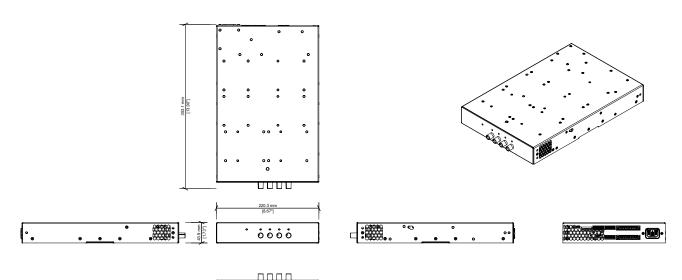
Residential



# **SmartAmp 20**

 $4 \times 125$ w amplifier with integral DSP





### **SPECIFICATIONS**

TYPE	: CLASS D power amplifier with DSP
POWER OUTPUT (4Ω-16Ω)	: 4 x 125W
70V - 100V OUTPUT	4 x 125W
DIGITAL SIGNAL PROCESSING	EQ & limiter presets for Optimal Audio
	· loudspeakers
COOLING	Forced air cooling with fan
ANALOGUE IN/LINK	: 4 balanced line inputs on Euroblock connectors
ANALOGUE INPUT IMPEDANCE	: $10k\Omega$ unbalanced, $20k\Omega$ balanced
MAXIMUM ANALOGUE INPUT LEVEL	÷ +24dBu
AMPLIFIER OUTPUTS	Euroblock
SIGNAL TO NOISE RATIO	: > 100 dB (A-weighted, 20 Hz - 20 kHz, 8 Ω load)
FREQUENCY RESPONSE	: 20 Hz - 20 kHz (+0/-0.25 dB (8 Ω load,
	: 3 dB below rated power)
TOTAL HARMONIC DISTORTION	: < 0.05 % (20 Hz - 20 kHz, 8 Ω load,
	3 dB below rated power)
SLEW RATE	: 8.796V/µS at 70 V peak, low impedence,
	: 17.77V/µS at 100 V peak, high impedence
DAMPING FACTOR	: 370 with 8Ω load
CONTROL AND MONITORING	: GPIO
NETWORK PROTOCOL	:
DSP SAMPLE RATE	: 48kHz
MAINS POWER INPUT	: Universal Mains, 100-240V, 50-60Hz
MAINS CONNECTOR	: IEC
POWER CONSUMPTION	: 150W
HEAT GENERATED	: 540 kJ per hour
DIMENSIONS	: (W) 220mm x (H) 44mm x (D) 353mm
	: (W) 8.67" x (H) 1.73" x (D) 13.90"
WEIGHT	: 2.4kg (5.3lbs)
ACCESSORIES	Rack ears and connection plate
(available separately)	Rear rack support kit
	: Wall/desktop mount kit





Paint Finish

Weight

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