



Amplifiers

SmartAmp 20

4 x 125w amplifier with integral DSP



Optimal Audio



FEATURES

- Desktop or rack mounted
- Signal processing presets for Optimal Audio loudspeakers
- 125 watts per channel into 4Ω-16Ω 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



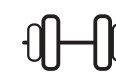
Houses of
Worship



Corporate
Offices



Museums



Fitness Studios



Residential



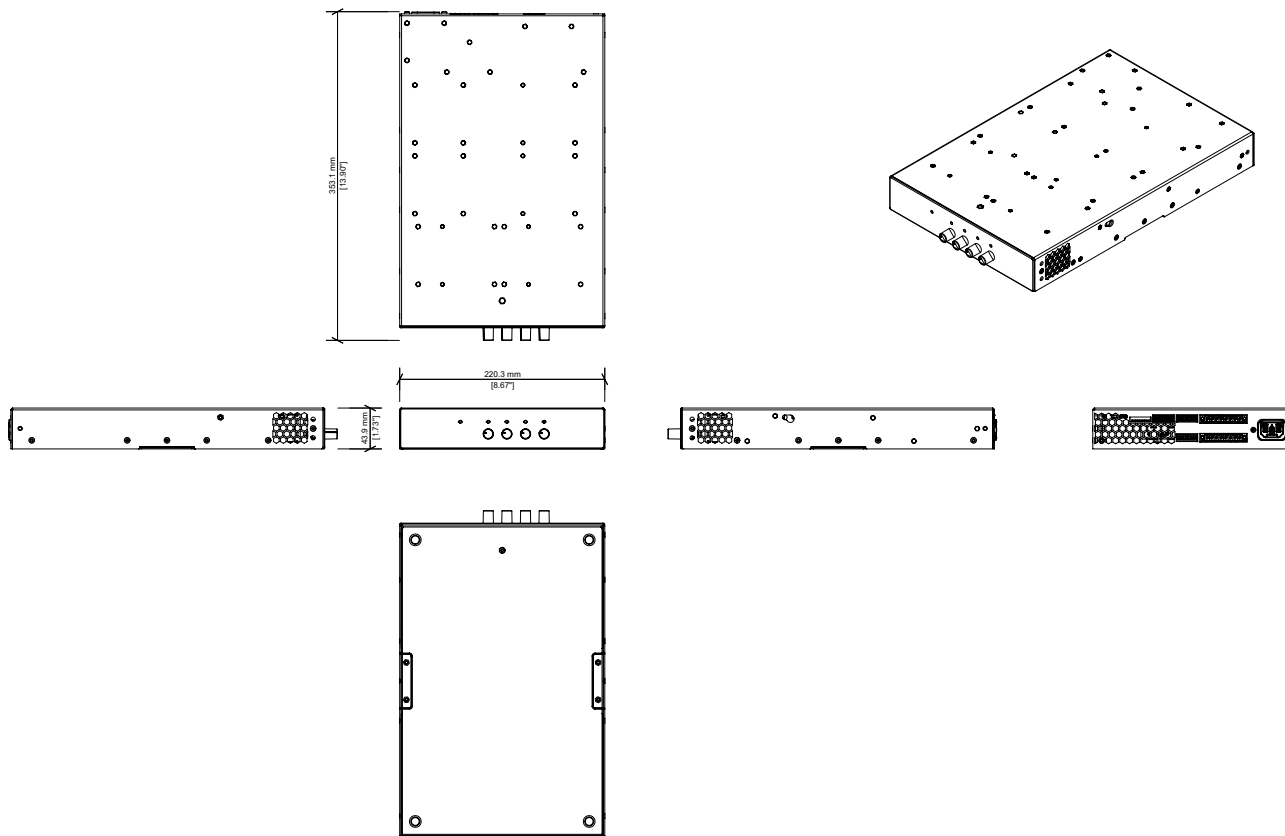
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SPECIFICATIONS

TYPE	CLASS D power amplifier with DSP
POWER OUTPUT (4 Ω -16 Ω)	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 Ω unbalanced, 20k Ω 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/ μ S at 70 V peak, low impedance, 17.77V/ μ S at 100 V peak, high impedance
DAMPING FACTOR	370 with 8 Ω 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 (available separately)	Rack ears and connection plate Rear rack support kit Wall/desktop mount kit



Paint Finish



Weight

optimal-audio.co.uk

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