

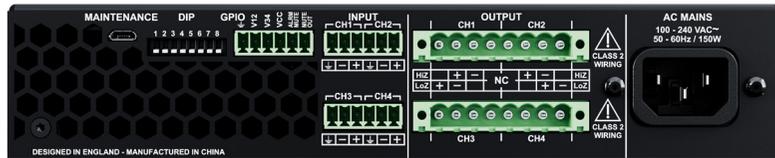
Amplifiers

# 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
- Universal Mains, PFC and Energy Star Compliant

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.

Power factor Correction power supply technology enables universal AC mains operation, eliminating the need for local market specific power regulation and potential reliability issues. The power supply delivers consistent, regulated power worldwide with ultra low standby power consumption for EuP2103 and energy star compliance.

## APPLICATIONS



Cafes



Bars/  
Restaurants



Retail



Wedding  
Venues



Hotels



Education  
Facilities



Houses of  
Worship



Corporate  
Offices



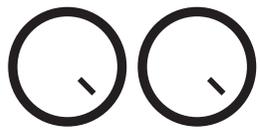
Museums



Fitness Studios



Residential



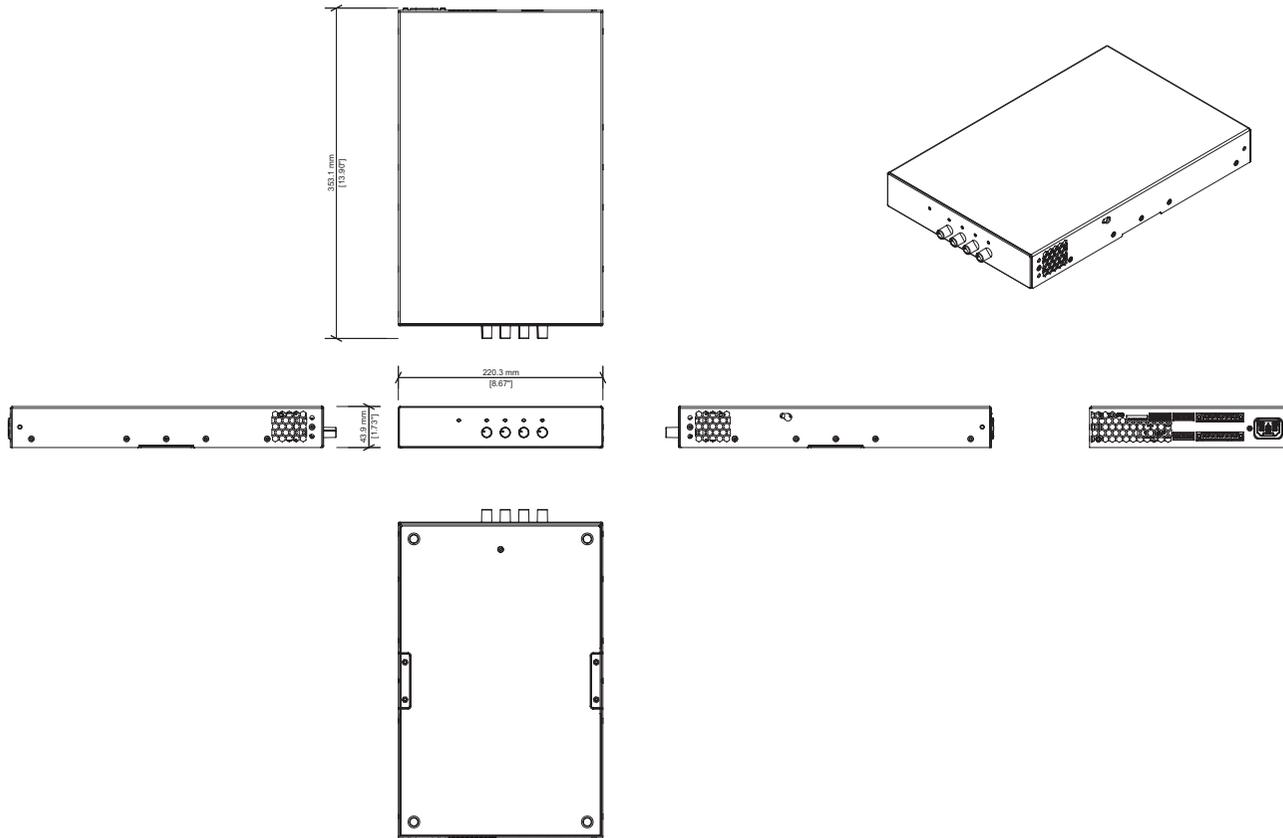
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4 x 125W amplifier with integral DSP



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## 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	: 10kΩ unbalanced, 20kΩ balanced
MAXIMUM ANALOGUE INPUT LEVEL	: +24dBu
AMPLIFIER OUTPUTS	: Euroblock
SIGNAL TO NOISE RATIO	: > 100dB (A-weighted, 20Hz - 20kHz, 8Ω load)
FREQUENCY RESPONSE	: 20Hz - 20kHz (+0/-0.25 dB (8Ω load, 3dB below rated power)
TOTAL HARMONIC DISTORTION	: < 0.05% (20Hz - 20kHz, 8Ω load, 3dB below rated power)
SLEW RATE	: 8.796V/μS at 70V peak, low impedance, 17.77V/μS at 100V peak, high impedance
DAMPING FACTOR	: 370 with 8Ω load
CONTROL AND MONITORING	: GPIO
DSP SAMPLE RATE	: 48kHz
MAINS POWER INPUT	: Universal Mains, 100-240V, 50-60Hz
MAINS CONNECTOR	: IEC
POWER CONSUMPTION	: 150W
HEAT GENERATED	: 540kJ 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

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