

AI3-4-100 Digital Processor Power Amplifier



The digital audio processor features a built-in professional audio processing chip, utilizing a single professional audio processor (8-core, 6T high computing power), and incorporates industry-leading audio signal processing algorithms, such as the low-latency ClearVoice AI algorithm, adaptive sound field control technology, multimodal AI noise reduction system, spatial sound field modeling technology, a dual-engine architecture combining traditional audio processing with deep AI algorithms, and dynamic beamforming.

These features effectively enhance the quality of voice interaction and deliver outstanding audio processing performance; It supports both analog and network audio signal transmission and processing, integrates a $4 \times 100\text{W}$ power amplifier, and incorporates the industry-leading 5A audio preprocessing algorithm, effectively improving the quality of voice amplification and interaction; it supports connection with large microphone arrays for flexible and diverse application scenarios, allowing multiple units to be installed and used simultaneously, with users able to manage and control the devices centrally via PC debugging software.

It supports multi-channel analog and network audio output and processing, making it suitable for video conference rooms, seminar rooms, and university teaching environments. A built-in Dante module enables network audio transmission. Equipped with proprietary advanced algorithms, it automatically adapts to various scenarios, ensuring clear and highly accurate voice reproduction whether for local sound reinforcement or output to remote terminals.

Technical Specifications

Product	Module	Features	Specifications
Digital Audio Processor	Algorithm	Supported algorithms	AFC、ANS、AEC、AGC、ARR
		Audio feedback gain	≥18dB
		Noise reduction level	≥36dB
		Echo Cancellation Gain	≥90dB
		Echo cancellation length	≥1s
		Reverb Suppression	≥18dB
		Maximum gain	≥30dB
	Hardware	Sampling rate	48k
		Frequency response	100Hz～20kHz, ±0.5dB
		Signal-to-noise ratio	90dB
		Distortion	≤0.1%
		Input Impedance (Balanced)	20kfi
		Output Impedance (Balanced)	200fi
		Maximum input level (Balanced)	4dBu
		Maximum Output Level (Balanced)	10dBu
		Input Gain Adjustment	64dB
		Output Gain Adjustment	64dB
		Phantom Power	48V
		485 Central Control Interface	Support
		Amplifier output power	4*100W
	Other specifications	Power supply voltage	AC 180-260V, 0.75A 50/60Hz
		Dimensions (L x W x H)	483x269.2 x44.4(mm)
		Operating temperature	-10℃~50℃
		Storage temperature	-20℃~70℃
		Color	Black
		Weight	3.65kg

Environmental Factor

Operating temperature	-10℃～50℃
Storage temperature	-20℃～70℃
Operating humidity	10%~90%RH
Storage humidity	10%~90%RH

Disclaimer:

Actual product dimensions and weight may vary due to product configuration and manufacturing processes. Please refer to the actual product for details. The product images in this specification are for illustrative purposes only. The actual product (including but not limited to its appearance, color, and dimensions) may differ slightly. Please refer to the actual product for details. In order to provide the most accurate specifications possible, the text, images, and other content in this specification sheet are subject to real-time adjustments and revisions to ensure they align with the actual product performance and specifications. We reserve the right to make such modifications and adjustments without prior notice.