

KYRO KONNECT I/O

Open architecture DSP server



256 DANTE

CDT100 M3

999 Presets

Modular

Overview

The KYRO KONNECT I/O is the Flagship model of the ERTHPOT product line, featuring three 1GHz processing chips. Running on a real-time Linux operating system, the ERTHPOT platform offers enhanced localisation functions through independent research and development. Its intuitive drag-and-drop interface and diverse data processing capabilities enable the creation of various medium-scale network audio applications within a digital network environment.

The server includes network and dual host backup functions, with an intelligent algorithm managing automatic backups. For mirror backup, master and slave servers simply require identical configurations, facilitated by an in-system mechanism. A heartbeat signal-based system ensures seamless physical and logical backups, guaranteeing uninterrupted operation and system security.

The KYRO KONNECT I/O server has eight card slots, supporting various audio cards such as 4-channel analog input/output, 4-channel AEC, and 2x2 channel USB sound cards, ensuring comprehensive signal compatibility. It can locally support up to 32 analog channels. Both integrated and independent channels boast exceptional hardware quality in terms of frequency response, dynamic range, and total harmonic distortion. The KONNECT I/O server supports 128x128 network transmission.

The host and interface machines allow for custom board configurations, with optional input, output, and AEC cards. It's possible to configure all input channels with AEC cards, creating a 96-channel AEC input system that leverages AEC card DSP resources for advanced audio processing. The system's flexibility and versatility cater to diverse user needs and usage scenarios.

The Erthpot KYRO KONNECT I/O system platform is compatible with various I/O peripheral equipment, including wall controllers, call stations, and wired touch screens. In large-scale integrated systems, these peripherals facilitate different applications based on specific usage requirements, suitable for environments like theme parks, airports, railway stations, and large supermarkets. The system incorporates a built-in Lua script, allowing for customization and extension via standard C language programming, and integrates with the host's GPIO and RS232/RS485 interfaces for broader application scenarios.

The system features an easy operation interface that is both simple and intuitive. The control software enables easy setting and recall of audio system parameters and plans through simple mouse operations, allowing users to focus on the final audio effect without concerning themselves with complex control or call processes. The graphic control interface is a key aspect of the system, offering a "what you see is what you get" experience. Control can be achieved via computer software, wireless touch screens for enhanced convenience, or web control for compatibility across different operating systems.

Key Features

- Equipment type: Optional board plug-in audio processing server.
- Drag-and-drop DSP module (non-fixed), unified management.
- This machine has 8 expandable card slots, and can be equipped with 4-channel microphone/line input card, 4-channel line output card, 4-channel AEC (acoustic echo cancellation) microphone/line input card, 2-channel analog phone card, 2-channel VOIP card, 2x2USB sound card.
- Transmission method: equipped with dual network hot backup transmission.
- AEC channel: local 20 channels, supports adding AEC card, can support 80 channels of AEC.
- Audio playback: Built-in 16-channel player, supports MP3 and WAV audio files.
- Dante network channels: 128x128 channels of Gigabit network transmission with network transmission backup.
- AEC: Supports custom addition of independent AEC modules, with a maximum of 16 independent AEC.
- Playback/recording: 4-channel audio playback supports timed playback of WAV and MP3, and 1-channel lossless recording; Built-in white noise, pink noise and other signal generators.
- Graphical user interface that can be edited as needed, supporting control on the software side, web side, and mobile side.
- Built-in Lua script: provides flexible expansion and customization functions. Dual power supply redundancy (AC/DC).

Specification

Audio/IO capacity	8 audio/IO card slots	Common mode rejection ratio (@ 0 dB)	> 91 dBu
USB storage capacity	64G	Maximum input level (@ 1% distortion)	+ 22 dBu
Audio/IO capacity Dante network channel capacity	128 × 128	Dante Primary/Secondary	RJ45 1000 Mbps
Dynamic range	> 118 dB	Voltage	220 VAC - 240 VAC, 50 Hz
Frequency response (± 0.2 dB)	20 Hz to 20 kHz	AC main power supply	IEC connector
Phantom power	+48V/10mA max	Product dimensions (width × height × depth)	483 × 88 × 364 mm
Frequency response	(20~20kHz):±0.3dB	Transport weight	8.5 KG
Input impedance	5.5 kΩ		
Signal-to-noise ratio	< -112 dB		
THD + N	≤ 0.002%		