

IP Extender 200 Series UHD Transceiver with Dante Audio

IPE-200UD-TZ



DESCRIPTION

Taska IPE-200UD-TZ is a new generation of professional 4K60 H.264/H.265 all-in-one codec transceiver which comes with Dante audio. Utilizing NeuroMesh Codec technology, it delivers uncompromised video quality with pixel-perfect color accuracy, making it ideal for color-critical applications. Designed for reliability in mission-critical environments, it features dual-network redundancy with auto-switching between Gigabit Ethernet and SFP ports (prioritizing Ethernet) to ensure uninterrupted ultra-low-latency AV transmission over standard 1G networks at distances up to 100 meters.

This versatile unit provides comprehensive audio processing capabilities in both operational modes. In encoder mode, it converts either HDMI or analog audio input to Dante Tx transmission while simultaneously converting Dante Rx to analog audio output. In decoder mode, the device converts decoded audio from video streams to Dante Tx transmission and seamlessly mixes decoded audio with Dante Rx streams for synchronized HDMI output, offering complete audio routing flexibility for professional installations.

PRODUCT FEATURES

- | HDCP 2.2 compliant
- | Support video resolution up to 4K60Hz (4:4:4), 18Gbps video bandwidth, as specified in HDMI 2.0b
- | Support LPCM 2.0CH 48kHz audio format
- | Integrated encoder and decoder design, compatible with both fiber and copper connections
- | NeuroMesh Codec -Proprietary intelligent compression technology
- | Support 2x2 Dante Audio. Encoder mode, convert HDMI or analog audio input for Dante Tx transmission; Convert Dante RX to analog audio output. Decoder mode, convert decoded audio from video stream to Dante Tx; Mixing decoded audio from video stream with Dante Rx for HDMI output.
- | Window roaming function: a single decoder unit can process up to 16 signals, supporting arbitrary windowing, roaming, overlaying, and splicing
- | KVM seat management (one-to-one & one-to-many), enabling one user to operate multiple PCs
- | Universal H.264/H.265 protocol support, supporting IPC access and seamless integration with security camera products
- | Supports high-definition background images (both video and static images) and multi-screen splicing display
- | Support scrolling subtitles and character overlay
- | Support point-to-point signal extension
- | Support signal distribution, multicast mode, matrix and video wall functions over a 1G Network Switch
- | Support user rights management
- | Flexible control via KVM, APP and Control Server (IPE-300C)
- | Standard POE supported (IEEE802.3at)
- | Encoder supports HDMI local loop out
- | Encoder supports audio embedding and de-embedding function

SPECIFICATION

	Technical
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Compression Standard	H.264/H.265
Video Bandwidth	18Gbps
Video Resolution	4096x2160p60Hz, 4096x2160p50Hz, 4096x2160p30Hz, 4096x2160p25Hz, 4096x2160p24Hz, 3840x2160p60Hz, 3840x2160p50Hz, 3840x2160p30Hz, 3840x2160p25Hz, 3840x2160p24Hz, 1920x1080p60Hz, 1920x1080p50Hz, 1920x1080p30Hz, 1920x1080p25Hz, 1920x1080p24Hz, 1280x720p60Hz, 1280x720p50Hz, 1360x768p60Hz; 1680x1050p60Hz; 1920x1200p60Hz
Color Space	RGB 4:4:4, YCbCr 4:4:4/2:2/4:2:0
Color Depth	8/10/12bit
Encoding Sampling Rate	48KHz
HDMI Audio Formats	LPCM 2.0CH, 16bit, 48k
Analog Audio Formats	Left and right stereo analog audio
Dante Audio	Built-in 2x2 Dante audio module Encoder Mode Dante Tx: Copying audio from selected HDMI or analog input for Dante transmission. Dante Rx: Provides analog audio output from received Dante stream Decoder Mode Dante Tx: Breakout of decoded AVoIP audio for Dante transmission Dante Rx: Mixing decoded AVoIP audio with Dante Rx audio for HDMI output
Analog Input/Output Audio Parameters	Input/Output Impedance >=10k ohms/330 ohms Line Input/Output Level (Max) 1Vrms/1Vrms Frequency Response (+0.5dB, -1dB) 20Hz ~ 20kHz Audio S/N Ratio >90dB@ HDMI 0dB, 1kHz A-weighted Audio THD+N <0.05%@ HDMI 0dB, 1KHz
Network Port	1000Base-T (supporting PoE+)
Video Stream	Encoder mode Main Stream: 4096x2160p60 (NeuroMesh codec) Sub Stream: 1920x1080p30 (NeuroMesh codec) KVM Preview: 352x288p30 RTSP Main: 1920x1080p30 RTSP Sub: 1280x720p30 Decoder mode Maximum decode streams: 2 x 4096x2160p60; 1 x 4096x2160p60 + 8 x 1920x1080p30; 1 x 4096x2160p60 + 18 x 1280x720p30; 16 x 1920x1080p30
	Connection
Input	1 x HDMI IN [Type A, 19-pin female] 2 x AUDIO IN [3pin-3.81mm Phoenix connector, stereo balanced linear interface]
Output	1 x HDMI OUT [Type A, 19-pin female] 2 x AUDIO OUT [3pin-3.81mm Phoenix connector, stereo balanced linear interface]
Control	1 x LAN1 [RJ45, Mode1: AVoIP & Dante; Mode2: AVoIP only; supporting PoE+] 1 x LAN2 [RJ45, Mode2: Dante only] 1 x RS-232 [3pin-3.81mm Phoenix connector]; 1 x USB HOST [Type B, 4-pin female] 2 x USB DEVICE [Type A, 4-pin female]; 1 x SFP [Optical Fiber Module slot]
	Mechanical
Color	Black
Dimensions	204mm [W] x 132mm [D] x 30mm [H]
Weight	850g
	Electrical
Power Consumption	Encoder mode: 11.4W (Max) Decoder: 9.36W (Max)
Power Supply	Locking 5.5mm x 2.5mm jack: DC 12V/2.5A; PoE+ (IEEE802.3at)
	Environment
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20~80% RH (Non-condensing)
Storage Humidity	10~90% RH (Non-condensing)