

IP Extender, 100 Series, UHD Lite, Transceiver

IPE-100U-TZ



DESCRIPTION

Taska IPE-100U 4K30/1080P60 All-in-One Transceiver supports true-color 4:2:2 encoding and decoding, featuring dual-network redundancy (auto-switching between optical fiber and Ethernet cable, with Ethernet priority) with one Gigabit Ethernet port and one SFP optical port. It delivers premium-quality AV signals with ultra-low latency over standard 1G network switches, supporting transmission distances of up to 100m via Ethernet.

Taska IPE-100U enables seamless switching, video wall processing, multi-view display, and KVM remote workstation management. Its flexible transceiver design (configurable as either an encoder or decoder within the same chassis) significantly simplifies on-site deployment and inventory control. In encoder mode, it provides one HDMI 1.4 input (with loop-through) and analog audio embedding/de-embedding. In decoder mode, it offers one HDMI 1.4 output with analog audio de-embedding. Additionally, the encoder includes a built-in H.264 video preview module for real-time monitoring.

PRODUCT FEATURES

- | HDCP 2.2 compliant
- | Support video resolution up to 4K30Hz (4:4:4), 4.95Gbps video bandwidth, as specified in HDMI 1.4
- | Audio formats support LPCM 2.0CH 48kHz
- | Integrated design of encoder and decoder, supporting fiber and copper
- | Support window roaming function: a unit as decoder can process up to 16 signals, enabling arbitrary windowing, roaming, overlaying, and splicing
- | KVM seat management (one-to-one & one-to-many), supporting one person manages multiple PCs
- | Universal H.264/265 protocol, supporting IPC access and seamless integration with security camera products
- | Support high definition background image (both video and picture are available), as well as 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 (802.3af Class 3, PD mode)
- | Encoder supports HDMI local loop out
- | Encoder supports audio embedding and de-embedding function

SPECIFICATION

	Technical	
HDMI Compliance	HDMI 1.4	
HDCP Compliance	HDCP 1.4	
Video Compression Standard	H.264/H.265	
Video Bandwidth	4.95Gbps	
Network Port	1000M Base-T (supporting PoE)	
Video Resolution	3840x2160p30Hz, 3840x2160p25Hz, 3840x2160p24Hz,	
	1920x1080p60Hz, 1920x1080p50Hz, 1920x1080p30Hz,	
	1920x1080p25Hz, 1920x1080p24Hz,	
	1280x720p60Hz, 1280x720p50Hz,	
	1360x768p60Hz; 1680x1050p60Hz; 1920x1200p60Hz"	
Color Space	RGB 4:4:4, YCbCr 4:4:4/4:2:2/4:2:0	
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	
Analog Input/ Output Audio Parameters	Input/Output Impedance	>=10k ohms/330 ohms
	Line Input/Output Level (Maximum)	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	
Video Stream Protocol	RTSP	
	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 LAN [RJ45, supporting PoE]	
	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] × 130mm [D] × 30mm [H]	
Weight	682g	
	Electrical	
Power Consumption	Encoder mode: 6.6W (Max.); Decoder: 5.28W (Max.)	
Power Supply	Locking 5.5mm x 2.5mm jack: DC 12V/1A; PoE (IEEE802.3af Class 3, PD mode)	
	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)	