VX4000E Series

zero-frame latency 4K60Hz AV over IP SDVOE Transceiver



Description

This transceiver is an SDVoE-Compliant, All-In-One AV over IP solution that provides highest-quality, uncompressed 4K and zero-frame latency audio/video extension over a standard 10G Copper or Fiber Network Switch with instant switching, Video Wall and MultiView functions. It can transfer advanced HDMI content such as HDR (high dynamic range), full color-depth and multi-channel HD Bitstream audio. Flexible transceiver design (one box can be set to encoder or decoder) is much convenient in a real installation site and inventory control. Multiple control and data signals can be simultaneously transmitted with audio and video, including bi-directional IR, RS-232, USB KVM, CEC and 1G Ethernet.

Features

- Enables switching and extension of audio & video over standard Ethernet networks
- Compatible 4K60 RGB/4:4:4, HDR, 3D and broadcast-friendly 4K60 10-bit 4:2:2
- HDMI audio embedding, de-embedding and breakaway
- Independent switching with zero latency for all signal types
- Support signal extension, seamless switching, Matrix, Video Wall up to 9x9 and MultiView up to 25 windows
- Flexible audio routes control including bidirectional analog audio transmissions between Encoder and Decoder
- Support bi-directional IR and RS-232 control signal pass-through
- Support USB2.0 (KVM), CEC routing control
- Support IR, RS-232, TCP/IP, Web GUI control
- Supports 10GBaseT copper infrastructure over category cabling

- Optical fiber transmission when paired with standard SFP+ modules
- Single device for transmitter (Tx) and receiver (Rx) products

Specifications

Technical	
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2
Encoding / Decoding Data	1080p @ 60Hz 8bit – 3.4Gbps 4K UHD @ 30Hz 4:4:4 8bit – 6.4Gbps 4K UHD @ 60Hz 4:4:4 8bit – 8.7Gbps (with light compression)
Video Resolution (Max)	4096x2160p @ 60Hz 8bit 4:4:4 or RGB 3840x2160p @ 60Hz 12bit 4:2:2 Dolby Vision 3840x2160p @ 60Hz 10bit 4:2:2 HDR10/HLG 1920x1080p @ 60Hz 12bit
Network Bandwidth	10Gbps
Transmission Distance	70m (10G Copper transceiver over CAT6 cable) 100m (10G Copper transceiver over CAT6a/7 cable) 3m (10G SFP+ AOC cable) 550m (10G SFP+ Multimode transceiver over Multimode fiber) 10~80Km (10G SFP+ Single mode transceiver over Single mode fiber)
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input ports	1 x HDMI IN [Type A, 19-pin female] for Transmitter model
Output ports	1 x HDMI OUT [Type A, 19-pin female] for Receiver model
Audio	1x AUDIO IN/OUT [3.5mm Jack]
USB	1 x USB 2.0 Connector [Type-A, 4pin female] 1 x USB 1.1 Connector [Type-A, 4pin female]
RS232	1x 3-pin Phoenix Connector
IR I/O	1x 5-pin Phoenix Connector
Network ports	1 x 10G BASE-T [RJ45 jack] for Copper model 1 x 10G SFP+ [Fiber slot] for Fiber model
Mechanical	
Housing	Metal Enclosure
Dimensions	215 x 135 x 30 mm
Power Supply	DC Input: DC12V/2A PoE Input: IEEE802.3at (optional)
Power Consumption	< 10W

Operating Temperature	32 - 104°F / 0 - 40°C		
Storage Temperature	-4 - 140°F / -20 - 60°C		
Relative Humidity	20 - 90% RH (no-condensing)		
Resolution / Cable Length	**4K60 - Feet / Meters**	**4K30 - Feet / Meters**	**1080P60 - Feet / Meters**
HDMI IN / OUT	16ft / 5m	32ft / 10m	50ft / 15m
The use of “Premium High-Speed HDMI” cable is highly recommended.			

Order Information

Models	
VX4000E-TR-F	SDVOE AV over IP Transceiver Fiber (Support both Encoder & Decoder)
VX4000E-TR-C	SDVOE AV over IP Transceiver Copper (Support both Encoder & Decoder)
VX4000E-TR-CF	SDVOE AV over IP Transceiver Combo (Support both Encoder & Decoder)
VX4000E-TX-F	SDVOE AV over IP Transmitter Fiber (Support only Encoder mode)
VX4000E-RX-F	SDVOE AV over IP Receiver Fiber (Support only Decoder mode)
VX4000E-TX-C	SDVOE AV over IP Transmitter Copper (Support only Encoder mode)
VX4000E-RX-C	SDVOE AV over IP Receiver Copper (Support only Decoder mode)
VX4000E-TX-CF	SDVOE AV over IP Transmitter Combo (Support only Encoder mode)
VX4000E-RX-CF	SDVOE AV over IP Receiver Combo (Support only Decoder mode)