AV Over IP Scaling Multimedia Extender with USB KVM, VGA, PoE and Audio embedding/de-embedding



Description

VINX-210AP-HDMI-ENC is a LAN based encoder multimedia device to extend HDMI video from a local source to a remote sink. The VINX encoder and decoder devices connect either via a direct CATx cable connection or through a Gigabit Ethernet switch in between. The maximum delivery distance can reach to up to 100 m with minimal latency and employing a quality, proprietary wavelet transform based image compression.

The maximum supported resolution is 3840 x 2160 @ 30Hz with 7.1 audio.

VINX devices support both static and dynamic (DHCP) IP address settings. 100 factory EDID presets and five user EDIDs are stored in the encoder. These units feature embedded web for control.

Front panel DIP switches serve quick manual setting for pairing maximum 15 encoder devices to decoders over the network, a quick and easy installation advantage for digital signage applications. Gap and bezel compensation can be adjusted for video walls. Scaling is available on the decoder side and videos can be freely cropped. With the help of the VINX Video Wall Wizard, installation of a video wall can be reduced to one tenth of the usual time needed when using similar, third party products.

Network Requirements

1GbE network with Layer 3 switch (IGMPv2, IGMP Snooping, IGMP Fast Leave, Jumbo Frame Support, Multicast Filtering).

Highlight Features

- 3840 x 2160@30Hz resolution over a 1 Gigabit network with very low latency
- Up to HDMI 2.0 4K 2160p@60Hz 4:2:0 Video Input supported
- Audio supports LPCM and Dolby Digital /Dolby Digital Plus/DTS/ Dolby TruHD/DTS-HD bit stream
- HDCP compliant
- PoE remote powering via 1GbE Ethernet port
- Audio embedding and de-embedding
- Local HDMI port for monitoring on the TX
- Variable maximum bit rate (10 Mbps ~ 800 Mbps)
- USB pass-thru for IP KVM application
- LED feedbacks, DIP switches and physical buttons for quick and easy setup and operation
- Embedded web control, direct and networked control via PC
- The device can be controlled via Lightware's proprietary LW3 protocol commands
- Gap and bezel compensation for video wall applications, cropping adjustment capability
- Output video signal scaling to adjust to sink properties

Recommended Applications

- Shopping malls and video walls
- Sports bars
- Schools/universities
- Server farms (KVM)
- Corporate meeting rooms
- Multiroom ocean cruisers

Lightware

VINX Variant Comparison Table

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Features	VINX-120-HDMI-ENC	VINX-120AP-HDMI-ENC	VINX-210AP-HDMI-ENC	VINX-110-HDMI-DEC	VINX-110AP-HDMI-DEC
Component type	Encoder (Transmitter)	Encoder (Transmitter)	Encoder (Transmitter)	Decoder (Receiver)	Decoder (Receiver)
Max. Image Resolution	3840 x 2160 @30Hz	3840 x 2160 @30Hz	3840 x 2160 @30Hz	3840 x 2160 @30Hz	3840 x 2160 @30Hz
Video Interface	HDMI Female (In), HDMI Female (Out, Loopback)	HDMI Female (In), HDMI Female (Out, Loopback)	HDMI Female (In), VGA Female (In)	HDMI Female (Out)	HDMI Female (Out)
Audio interface	×	3.5 mm stereo jack (In), 3.5 mm stereo jack (Out)	3.5 mm stereo jack (In), 3.5 mm stereo jack (Out)	×	3.5 mm stereo jack (In), 3.5 mm stereo jack (Out)
Scaling	×	×	×	✓ (Automatic or Custom)	✓ (Automatic or Custom)
Video Wall Wizard	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Video delay:	1.1 frames (source to sink)	1.1 frames (source to sink)	1.1 frames (source to sink)	1.1 frames (source to sink)	1.1 frames (source to sink)
EDID emulation:	Advanced EDID Management	Advanced EDID Management	Advanced EDID Management	Transparent EDID	Transparent EDID
EDID memory:	53 factory preset, 5 user programmable	53 factory preset, 5 user programmable	53 factory preset, 5 user programmable	Transparent EDID	Transparent EDID
HDCP	✓ HDCP 2.2	✓ HDCP 2.2	✓ HDCP 2.2	✓ HDCP 2.2	✓ HDCP 2.2
USB Device	Mini USB Type B	USB Type B	USB Type B	$4 \times$ USB Type A	$4 \times$ USB Type A
Network Interface	RJ45 Female	RJ45 Female, 1 Gbps SFP	RJ45 Female, 1 Gbps SFP	RJ45 Female	RJ45 Female, 1 Gbps SFP
Switch	4 Position Dip Switch	4 Position Dip Switch	4 Position Dip Switch	4 Position Dip Switch	4 Position Dip Switch
IR	3.5 mm Jack Female (IR Out)	3.5 mm Jack Female (IR Out)	3.5 mm Jack Female (IR Out)	3.5 mm Jack Female (IR In)	3.5 mm Jack Female (IR In)
RS-232	RJ12 Female	9-pole D-sub	9-pole D-sub	RJ12 Female	9-pole D-sub
Local Power	DC 5V	DC 12V	DC 12V	DC 5V	DC 12V
Power-over- Ethernet (PoE)	×	✓ PD (Powered Device)	✓ PD (Powered Device)	×	✓ PD (Powered Device)
Operation Temperature	0-40°C	0-40°C	0-40°C	0-40°C	0-40°C
Storage Temperature	-20-60°C	-20-60°C	-20-60°C	-20-60°C	-20-60°C
Humidity	0-90% RH, Non-condensing	0-90% RH, Non-condensing	0-90% RH, Non-condensing	0-90% RH, Non-condensing	0-90% RH, Non-condensing
Weight	370g	675g	675g	370g	675g
Housing	Metal Enclosure	Metal Enclosure	Metal Enclosure	Metal Enclosure	Metal Enclosure
Dimensions (L x W xH)	115 x 100.4 x 26 mm	218.5 x 104 x 25	218.5 x 104 x 25	115 x 100.4 x 26 mm	218.5 x 104 x 25
Rack mountable:	✓ (1/4 RU width)	✓ (1/2 RU width)	✓ (1/2 RU width)	✓ (1/4 RU width)	✓ (1/2 RU width)
Compatible with VINX Power Tray	\checkmark	×	×	\checkmark	×
Safety/Emission	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Warranty:	3 years	3 years	3 years	3 years	3 years