

Matrox® ConvertIP™ DRH

Dual-channel RJ45 HDMI-to-IP transmitter/receiver

Matrox ConvertIP DRH is a compact, standalone ST 2110 and IPMX transmitter/receiver device. Featuring HDMI I/O and three RJ45 ports on a single device, ConvertIP DRH is designed for 1G AV workflows and is optimal for an ultra-low latency experience. The device can deliver power over Ethernet through its RJ45 connection, or it can be powered through an optional power supply unit. Both can be used simultaneously to deliver power redundancy.



Technical specifications

Product	
Part Number	CIP-DRH
Form Factor	<ul style="list-style-type: none"> Standalone appliance Rack-mountable: 1U, 1/2 rack (horizontal)
Connectivity	
Video Input	1x HDMI
Video Input Resolutions	HD and 4K broadcast resolutions
Video Outputs	1x HDMI (zero latency pass-through in Tx mode)
Video Output Resolutions	HD and 4K broadcast resolutions
Audio Input/Output	<ul style="list-style-type: none"> Up to 8 channels of audio embedded in HDMI signal Unbalanced analog stereo input via 1/8" (3.5mm) jack Line Level
Network Connector	3x RJ45 (LAN 1 for Media and Control with PoE, LAN 2 for Media and Control (redundant), Control LAN for Control data)
RS-232	Yes ¹
Control and Management	Web browser-based UI, standalone utility
Performance	
Maximum Video Resolutions	4096 x 2160 60p
Bit Depth and Color Space	<ul style="list-style-type: none"> YCbCr 4:2:0 10-bit² and 8-bit³ YCbCr 4:2:2 10-bit RGB 4:4:4 8-bit SDR/HDR⁴
Video and Audio Processing	
Video Scaling	High Quality multi-tap 10-bit Up/Down Scaler
Video Deinterlacing	Yes
Color Space Conversion	Yes
HDCP Support ⁵	Yes
Encoding formats	
Video ⁷	Default compressed bitrates: 200 Mbps for HD content, 820 Mbps for 4K content <ul style="list-style-type: none"> Colibri codec included. 4:2:2 10-bit YUV and 4:4:4 8-bit RGB, 100 to 2000 Mbps JPEG-XS codec upgrade required.¹⁰ 4:2:2 10-bit YUV and 4:4:4 8-bit RGB, 100 to 2000 Mbps
Audio	Uncompressed PCM (~1 Mbps/ch)
Latency	Less than a 1/4 frame (<4 ms)
Network	
IP Addressing	<ul style="list-style-type: none"> IPv4 IPv6⁶ DHCP (default) and static IP
Supported Protocols	<ul style="list-style-type: none"> SMPTE ST 2110 (-10, -20, -21, -22, -30, -31, and -40) SMPTE ST 2059-2 SMPTE ST 2022-7
Redundancy	Yes (ST 2022-7)
Command and Control	HTTPS over TCP
Discovery, Registration and Control	NMOS discovery and control according to standards IS-04 v1.3 and IS-05 v1.1
PoE+	Yes (IEEE 802.3at Type 2)

Physical	
Product Dimensions	7.13 (D) x 7.53 (W) x 1.42 (H) inches 181 (D) x 191 (W) x 36 (H) mm
Unit Weight	1.40 lbs / 635 g
Cooling	Fanless
Power	<ul style="list-style-type: none"> • Device: Input: 12 volts, max 18 Watts • PoE+ • Optional PSU (sold separately) <ul style="list-style-type: none"> • Line Voltage: 100-240 V a.c., 0.5A • Frequency: 50-60 Hz • Input: IEC320-C14 • Output: DIN4 locking power connector
Hardware and Software	
Hardware Included	ConvertIP DRH appliance
Optional Hardware	ConductIP NMOS-based routing solution (Part #: CDCTIP-MRA)
Accessories (sold separately)	<ul style="list-style-type: none"> • ConvertIP power supply unit (Part #: EPS40WKIT-NA, EPS40WKIT-EU, EPS40WKIT-UK, EPS40WKIT-AU, EPS40W-10PK)⁸ • Rackmount kit⁹ (Part #: RMK-19TR-A) • Angled bracket kit (Part #: RMK-6BRKT-A) • Secure cable solution for HDMI (Part #: SK-SLND-4) • NRG redundant power supply unit (Part #: NRG-5-1DB or NRG-5-2DB)
Software	<ul style="list-style-type: none"> • Matrox ConvertIP Command Center (Web UI) • Matrox ConvertIP Manager (Microsoft® Windows® 10)
Optional software	JPEG-XS codec license
Environmental	
Operating Conditions	Temperature: 0 to 45 degrees Celsius Altitude: 650 hPa (3,580 m) to 1,013 hPa (0 m) Humidity: 20% to 80% non-condensing
Storage Conditions	Temperature: -40 to 70 degrees Celsius Altitude: 192 hPa (12,000 m) to 1,020 hPa (-50 m) Humidity: 5% to 95% non-condensing
General	
EMC/EMI Device Class	Class A
EMC/EMI Compliance	<ul style="list-style-type: none"> • CE (EU) • FCC (USA) • ICES-003 (Canada) • KC (Korea) • RCM (Aus/NZ)
Environmental Compliance	<ul style="list-style-type: none"> • China RoHS • EU RoHS • REACH
Warranty	Three-year limited warranty with free online or telephone support

1. 2. 3. 4. 5. 6. Available in a future software update.

7. Bitrates will vary according to resolution.

8. Part # EPS40W-10PK does not include IEC-C14 power cord. These cables must be sourced locally.

9. Can fit up to two ConvertIP units in a 1RU space.

10. For more information, contact your Matrox Video representative.

Contact Matrox Video

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