Matrox[®] ConvertIP[™] DRS

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

Matrox ConvertIP DRS is a compact, standalone ST 2110 and IPMX transmitter/receiver device. Featuring 12G-SDI, genlock, and three RJ45 ports on a singe device, ConvertIP DRS 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	t	
	Part Number	CIP-DRS
	Form Factor	Standalone appliance Rack-mountable: 1U, 1/2 rack (horizontal)
Connec	ctivity	
	Video Input	Tx mode: 12G SDI Rx Mode: No input
	Video Input Resolutions	HD and 4K broadcast resolutions
	Video Outputs	Tx mode: No output Rx mode: 12G SDI
	Video Output Resolutions	HD and 4K broadcast resolutions
	Genlock	Bi-Level and Tri-Level input support
	VANC ancillary data processing	Yes ¹
	Audio Input/Output	Up to 16 channels of audio embedded in SDI output 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 ²
	Control and Management	Web browser-based UI, standalone utility
Perform	nance	
	Maximum Video Resolutions	4096 x 2160 60p
	Bit Depth and Color Space	YCbCr 4:2:0 10-bit ³ and 8-bit ⁴ YCbCr 4:2:2 10-bit RGB 4:4:4 8-bit SDR/HDR ⁵
Video a	and Audio Processing	
	Video Scaling	High Quality multi-tap 10-bit Up/Down Scaler
	Video Deinterlacing	Yes
	Color Space Conversion	Yes
Encodir	ng formats	
	Video ⁶	Colibri 4:4:4 8-bit codec; HD 200 Mbps, 4K 800 Mbps Optional: JPEG-XS 4:2:2 10-bit; HD 400 Mbps, 4K 1.6 Gbps
	Audio	Uncompressed PCM (~1 Mbps/ch)
	Latency	Less than a 1/4 frame (<4 ms)
Networ	'n	
	Network Standard	RJ45 providing 1 GbE or 2.5 GbE Base-T Ethernet
	IP Addressing	IPv4 IPv6 ⁷ DHCP (default) and static IP
	Supported Protocols	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	1.47lbs / 665g
Cooling	Fanless
Power	Device: Input: 12 volts, max 18 Watts PoE+ Optional PSU (sold separately) 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 DRS appliance
Optional Hardware	ConductIP NMOS-based routing solution (Part #: CDCTIP-SERV)
Accessories (sold separately)	 ConvertIP power supply unit (Part #: EPS40WKIT-NA, EPS40WKIT-EU, EPS40WKIT-UK, EPS40WKIT-AU, EPS40W-10PK)[®] Rackmount kti[#] (Part #: RMK-19TR-A) Angled bracket kti (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	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	CE (EU) FCC (USA) ICES-003 (Canada) KC (Korea) RCM (Aus/NZ)
Environmental Compliance	China RoHS EU RoHS REACH
Warranty	Three-year limited warranty with free online or telephone support

2. 3. 4. 5. 7. Available in a future software update.
 Bitrates will vary according to resolution.
 Part # EPS40W-10PK does not include IEC-C14 power cord. These cables must be sourced locally.
 Can fit up to two ConvertIP units in a 1RU space.



Contact Matrox

Montreal Headquarters: 1-800-631-4903 (North America), 514-822-6364 (Worldwide) | video@matrox.com London Office: +44 (1895) 827300 Serving: United Kingdom, Ireland, Benelux, France, Spain, Portugal, Middle East, Africa Munich Office: +49 89 62170-444

Serving: Germany, Austria, Switzerland, Denmark, Finland, Norway, Sweden, Central and Eastern Europe, the Baltic States, Greece, Turkey, Italy

matrox[®]

© 2022 Matrox Graphics, Inc. All rights reserved. Matrox reserves the right to change specifications without notice. Contact Matrox for more details on specific requirements. Matrox and Matrox product names are registered trademarks in Canada or other countries and/or trademarks of Matrox Electronic Systems, Ltd and/or Matrox Graphics Inc. All other company and product names are registered trademarks of their respective owners. 06/2022