

TERADEK Prism

Prism: 4K H.264 HEVC Encoder/Decoder Card Rack System

Prism is a 4K H.264/HEVC encoder/decoder solution for broadcast, live production, and Pro AV applications. With room for up to nine codec cards in a 2U chassis (up to three codec cards in 1U chassis), Prism can encode or decode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity. Prism supports many common streaming protocols such as MPEG-TS, RTP, RTMPS, and SRT.



	CHASSIS	ENCODER CARD	DECODER CARD
VIDEO			
Video Inputs	2U: 9x SD/HD-SDI (75 Ω BNC) 1U: 3x SD/HD-SDI (75 Ω BNC)	SD/HD/3G/6G/12G-SDI (75 Ω BNC)	N/A
Video Outputs	2U: 9x SD/HD-SDI (75 Ω BNC) 1U: 3x SD/HD-SDI (75 Ω BNC)	SD/HD/3G/6G/12G-SDI (75 Ω BNC loop out)	2x SD/HD/3G/6G/12G-SDI (75 Ω BNC)
Genlock Input	1x Genlock input distributed to all codec cards	N/A	N/A
Supported Resolutions	N/A	4Kp 23.98/24/25/29.97/30/50/59.94/60 1080p 23.98/24/25/29.97/30/50/59.94/60 1080i 50/59.94/60 1080PsF 23/24/25/29/30 720p 50/59.94/60 576i 480i	4Kp 23.98/24/25/29.97/30/50/59.94/60 1080p 23.98/24/25/29.97/30/50/59.94/60 1080i 50/59.94/60 1080PsF 23/24/25/29/30 720p 50/59.94/60 576i 480i
VIDEO PROCESSING			
Video Compression	N/A	H.264: Baseline, Main, High, High10, High 4:2:2 up to 5.2 level HEVC: Main, Main Intra, Main10, Main10 Intra, Main 4:2:2 10, Main 4:2:2 10 Intra up to 5.1 High Tier	H.264: Baseline, Main, High, High10, High 4:2:2 up to 5.2 level HEVC: Main, Main Intra, Main10, Main10 Intra, Main 4:2:2 10, Main 4:2:2 10 Intra up to 5.1 High Tier
Supported Video Bitrate	N/A	250 Kbps to 85 Mbps	250 Kbps to 85 Mbps
Video Format Conversion Support	N/A	Built in video scaler and deinterlacer	Built in video scaler and deinterlacer

CHASSIS		ENCODER CARD	DECODER CARD
PROTOCOL SUPPORT			
Network Protocols	N/A	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	N/A	RTP/RTSP, RTMP, MPEG-TS, Teradek Streaming (TDS), and SRT	RTP/RTSP, RTMP, MPEG-TS, Teradek Streaming (TDS), and SRT
Bonding	N/A	Yes	Yes
Remote	N/A	Teradek Core	Teradek Core
AUDIO			
Audio Compression	N/A	AAC-LC, MPEG Layer 2	AAC-LC, MPEG Layer 2
Audio Input	N/A	Embedded stereo, 3.5mm Stereo Line Level Analog	N/A
Audio Output	N/A	N/A	Embedded stereo
IFB	N/A	3.5mm mic level input, Stereo headphone level output	3.5mm mic level input, Stereo headphone level output
PHYSICAL ATTRIBUTES			
Dimensions	2U: 17"W x 12.1"D x 3.5"H [431.8 x 307.3 x 88.9 mm] 1U: 17"W x 12.1"D x 1.75"H [431.8 x 307.3 x 44.5 mm]	N/A	N/A
Weight	2U: 143oz [4040g] 1U: 87oz [2474g]	N/A	N/A
Construction	Milled/Bent aluminum	Milled aluminum	Milled aluminum
INTERFACES			
Configuration Interface	N/A	Feature-rich Web UI for configuration and control	Feature-rich Web UI for configuration and control
Switches	On/Off and Reset Switch	Menu joystick and Reboot button	Menu joystick and Reboot button
Card slots	2U: 9x card slots 1U: 3x cards slots	N/A	N/A
POWER			
Power Input	2U: 2x Hot-swappable 500W A/C power inputs 1U: 500W A/C power input	Powered by chassis	Powered by chassis
Power Supply	Removable, redundant power supply	N/A	N/A
Nominal Power Consumption	5W	Up to 15W/card	Up to 15W/card
NETWORK			
Ethernet	2x 10/100/1000 Ethernet ports	N/A	N/A