RAPTOR ST 2110 SDI/IP GATEWAY

RAPTOR IP Gateway – JT-NM TESTED IP CONVERSION IN A RELIABLE OPENGEAR FORM FACTOR

RAPTOR-IPG efficiently adapts SDI interfaces to uncompressed ST2110 infrastructure. RAPTOR-IPG is fluent in many open control protocols such as NMOS, EmBER+, JSON API and DashBoard, thus giving you the freedom to soar through the IP environment of your choice. This openGear appliance’s benchmark IP interoperability ensure a lasting investment designed to adapt to evolving IP standards and control requirements.

Cena:
Kategorie: Video, Produkcja, Konwertery obrazu

OPIS

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Open Control

Open control gives you the freedom to pilot Raptor from our DashBoard™ control system, and/or seamlessly from many 3rd-party control systems (e.g. VSM, Magellan, etc.) using NMOS, EmBER+ and various other protocols.

Value & Performance for $2,995 USD

Up to 60 video streams of SDI/IP conversion in the compact, 2RU openGear chassis. The best part? At $250 per IP stream, RAPTOR-IPG is offered at the lowest price Ross has ever seen from a JT-NM Tested SDI/IP Gateway. **USA pricing, international prices will vary*

Modularity

1 to 5 modules slide into an openGear frame offering economical increments of 12 video streams.

Flexible Audio & Video Mapping

One-to-many mapping allows any IP flow to be assigned to one or many outputs, simplifying your operation. Raptor supports multiple audio streams per output adapting easily to any audio stream and channel structure. Plus, an integrated audio router allows you to easily shuffle and assign audio channels where you need them.

Flexible Synchronization

Synchronization in ST2110 is not easy, but Raptor makes it easier by enabling accurate and adjustable control of your end-to-end latency and audio/video alignment.

Benchmark Interoperability

Ross Video’s SMPTE ST 2110 technology is amongst the most mature and widely deployed in the industry, both directly in Ross products and also through its OEM & Developer Solutions program. We are committed to ensuring that your investment in Ross products will interoperate with third parties, following the AIMS Roadmap.

Features

AIMS Compliant IP

- 12 (twelve) stream up to 1080p rates (6 in + 6 out) without hitless redundancy
- 12 (twelve) stream up to HD rates (6 in + 6 out) with ST 2022-7 redundancy
- ST 2022-7 redundancy supported on mix of 1080p and HD streams, up to maximum capacity allowed by 10GE interface

Modular

Modular processing enables you to scale and blend your needed mix of functions within an openGear chassis, paying only for what you need.

$250* per IP stream

RAPTOR is format-agile, reliable and the best part? RAPTOR is offered at the lowest price per IP stream for any JT-NM Tested IP Gateway. IP technology is now more affordable than ever.

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Open Control

Various control API:

- DashBoard for discovery, device control, and connection control
- EmBER+ connection control and some device control
- NMOS IS-04 and IS-05 for discovery, registration and connection control
- A published JSON API for integration of the full range of Raptor configuration and control functions into a 3rd-party control system

Unmatched performance & reliability

- Powerful embedded dual-core ARM Cortex A9 1.5GHz processor
- Deep packet buffers, which are critical in heavily-loaded networks and for effective lip sync
- Reliable and robust thermal and power design that will not let you down.

Specification

AIMS COMPLIANCE	RAPTOR-IPG
SMPTE ST 2110 Suite	**10, System Timing and Definitions** **20, Uncompressed Active Video** – 720p50/59.94/60 – 1080i50/59.94/60 – 1080p50/59.94/60 **21, narrow sender & wide receiver** **30, PCM Digital Audio, Conformance Level A & B & C** – ST2110-30 – Packet times of 1ms and 125us – 48KHz samples – 1 to 80 channels per stream
SMPTE ST 2022-7	Seamless Protection Switching of all stream types
Audio/Video stream processors	12 simultaneous video streams (6 receivers + 6 senders) 128 simultaneous audio streams 16 audio channels per SDI interface

AIMS COMPLIANCE	RAPTOR-IPG
System timing and reference	PTP Slave or Master (SMPTE 2059-2, AES67 and IEEE-1588 default profiles) Media Receiver Timing Modes: – Low-Latency Timing Mode

HARDWARE	RAPTOR-IPG
Network Interfaces	2 x SFP (10GE)
Media Interfaces	6 x SDI inputs (hardware capable of SD-SDI up to 3G-SDI) 6 x SDI outputs (hardware capable of SD-SDI up to 3G-SDI)
SDI Video Formats	720p59.94/60 1080i59.94/60 1080p59.94/60 720p50 1080i50 1080p50
GE Management Interface	1 x RJ45
SD Card	Use SD Card for dual bank upgrade scheme

CONTROL & MONITORING	RAPTOR-IPG
Control and Setup	DashBoard for comprehensive device discovery, control and connection management A published JSON API for integration of DashBoard into a 3rd-party control system EmBER+ BESS v1.1 connection control RAVENNA discovery and registration NMOS *(with some limitations)*
Management Control Ports	Dedicated Ethernet interface (RJ45) for all management & control protocols In-band control on 10GE media ports

CONTROL & MONITORING	RAPTOR-IPG
Dashboard Discovery	SLP discovery for automatic “frame” detection support Ross Walkabout device discovery and IP configuration
Firmware Upgrades via DashBoard and JSON API	
Status & Telemetry via DashBoard and JSON API	SFP Status Basic PTP Status (i.e. PTP locked, Mean Path Delay, Offset From Master) Basic alarms (i.e. Network Delay too big, No packets received, PTP Unstable)
Dashboard Connection Management	Sender/Receiver creation through Dashboard Talker/Listener creation through Dashboard Manually Create or using Advertisements Configuration of Audio shuffling crossbar Configuration of Video crossbar for one-to-many routing of receivers to SDI outputs
EmBER+	BESS v1.1 Connection Management Establish connections for audio and video streams Network stream groups get routed as a whole One-to-many routing of receivers to SDI outputs Mix and match audio and video from different sources
NMOS	IS-04 Discovery IS-05 Connection Management *See Errata for limitations related to NMOS support*
IGMP	IGMPv3 support Multicast ranges supported: 232.x.x.x, 239.x.x.x