

VEGA-8300E

8Kp60 HEVC Broadcast Video Encoder

Preliminary



Features

- Compact 8Kp60 HEVC Encoder Appliance with comprehensive control/management via web browser
- Live video and audio ingress via 4 x SDI-12G inputs with up to 22.2ch embedded audio
- Real time HEVC 10-bit 4:2:2 encoding with 2SI and slice-mode support – up to 300Mbps
- In-built live origin streaming engine with variety of output formats including HLS and RTP
- 1 x GbE network interfaces for redundant streaming or attach to separate mgmt./production networks
- 2 x SATA HDD storage bays accessible from front panel for local recording
- Portable size – 1.5RU x 370mm wide x 380mm deep

Introduction

The VEGA-8300 is a fully integrated 8Kp60 live HEVC contribution encoder and streaming appliance in a compact low power form factor with a user-friendly web-based control and management interface. The unit is ready to use out of the box, featuring a 4 x SDI-12G 8K live audio/video input, a hardware-accelerated 8Kp60 10 bit 4:2:2 capable HEVC encoder, and a streaming engine output that can be configured to transmit video point to point to local receivers / players or broadcast across the world via Amazon Cloudfront services. The unit also features local storage that can be used to record encoded video for later if live transmission is not possible. By using hardware encoding linked closely to the capture interface, the size and power consumption of the VEGA-8300 is significantly lower than software-only equivalents.

Specification

Video Inputs	Channels/Interface	4 x 12G-SDI, up to 8K60p, 8bit/10bit, YUV
Video Encoding	Standard	HEVC (H.265)
	HEVC profile	Main, Main 10
	HEVC Tier	Main, High
	HEVC Level	HEVC Level 5.1
	Chroma Sampling	4:2:2, 4:2:0
	Bit Depth	8-bit, 10 bit
	Encoding Bitrate	60 Mbps- 300 Mbps
	Encoding Bitrate Control	CBR, VBR
	Resolution	7680 x 4320
	Frame Rates	60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p
GOP Structure	IBBB, Hierarchical GOP	
Audio Encoding	Channels	Up to 22.2 audio stereo channels
	Input Formats	Input: PCM Output: AAC-LC
	Sampling Frequency	48KHz
	Connector	SDI Audio
System Features	Streaming Protocol	FFmpeg supported protocol (RTMP/HLS/RTP/TS over TCP,UDP)
	Management & Control Interface	Local and Remote Web GUI interface
	Watchdog Reset Timer	Programmable 1-255 sec
Ethernet	Interface	10/100/1000 Mbps
	Connector with LED	LAN 1: Intel I210 RJ45 x 1
Other Rear I/O	USB 3.0	2
	Ethernet	1
	Display Port 1.4	1
	HDMI 2.0	1
	Video Input	4(BNC Connector, 12G-SDI)
Front I/O	USB 3.0	2
Storage	Internal	M.2 (M-key 2280 type) (Lite-on M.2 2280 500G PCI-E Gen3x4 SSD T)
	Hot swappable SATA3 HDD storage bays	2 (SSD/ HDD 2.5" 1TB 7KRPM SATA3) (Option for RAID 0 & 1)
Front Control	LCD	1 (16 x 2 dot matrix)
	Button	5
Power	Power	350W
	Power Input	AC input 100-240V
Physical	Dimension	370mm x 380mm x 85mm
Environmental	Operating Temperature/Humidity	0 ~ 45°C/20 ~ 90RH
Compliance	Certification	CE, FCC Class A, CCC

Ordering Information

Part Number	Description
VEGA-8300E-S0E0	8Kp60 HEVC Video Encoder System