

VEGA-6311

4K/UHD Professional Video Network Solutions

Preliminary



Features

- 4K/uhd multi-format codec
- Contribution grade performance
- Flexible video connectivity
- Small form factor
- Ready for the ip-connected future

Introduction

The VEGA-6311 is a video encoder/decoder platform that uses H.265/HEVC high-efficiency video encoding technology to enable high quality 4K/UHD signal transmission in professional contribution applications, and all in a low-power half-1U chassis.

Features

4K/UHD MULTI-FORMAT CODEC

VEGA-6311 features the latest technology from Socionext capable of real-time encoding and decoding of H.265/HEVC, H.264/AVC and MPEG2 video and audio at up to 4K/UHD resolution and 60fps.

POWERFUL LOCAL CPU

A COM Express Module with a choice of 6th Generation Intel Core CPUs provides intense graphics performance and multitasking capabilities with HDMI display output and 2 x USB connections.

CONTRIBUTION GRADE PERFORMANCE

The encoder/decoder subsystem supports HEVC Main 10 and Main 422 10 profiles (10bit depth 4:2:2 chroma subsampling) for the best possible video quality on the streaming link. Low latency modes add to the appeal for real-time sports action at 60fps.

FLEXIBLE VIDEO CONNECTIVITY

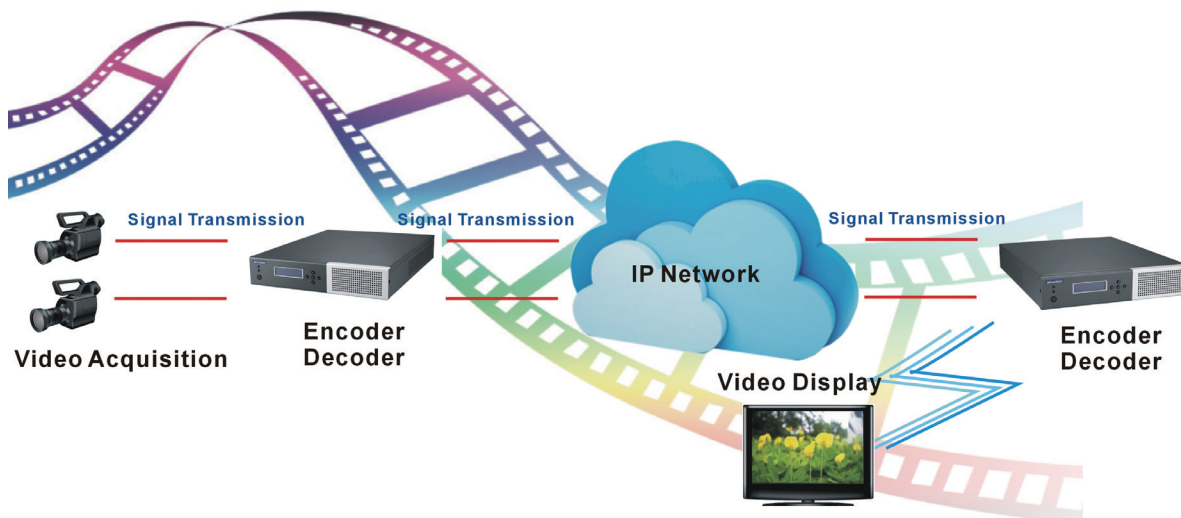
The VEGA-6311 offers the latest in video connectivity. In addition to quad 3G-SDI video inputs and ASI connections, it supports a single 12G-SDI input for latest professional 4K/UHD cameras and accessories.

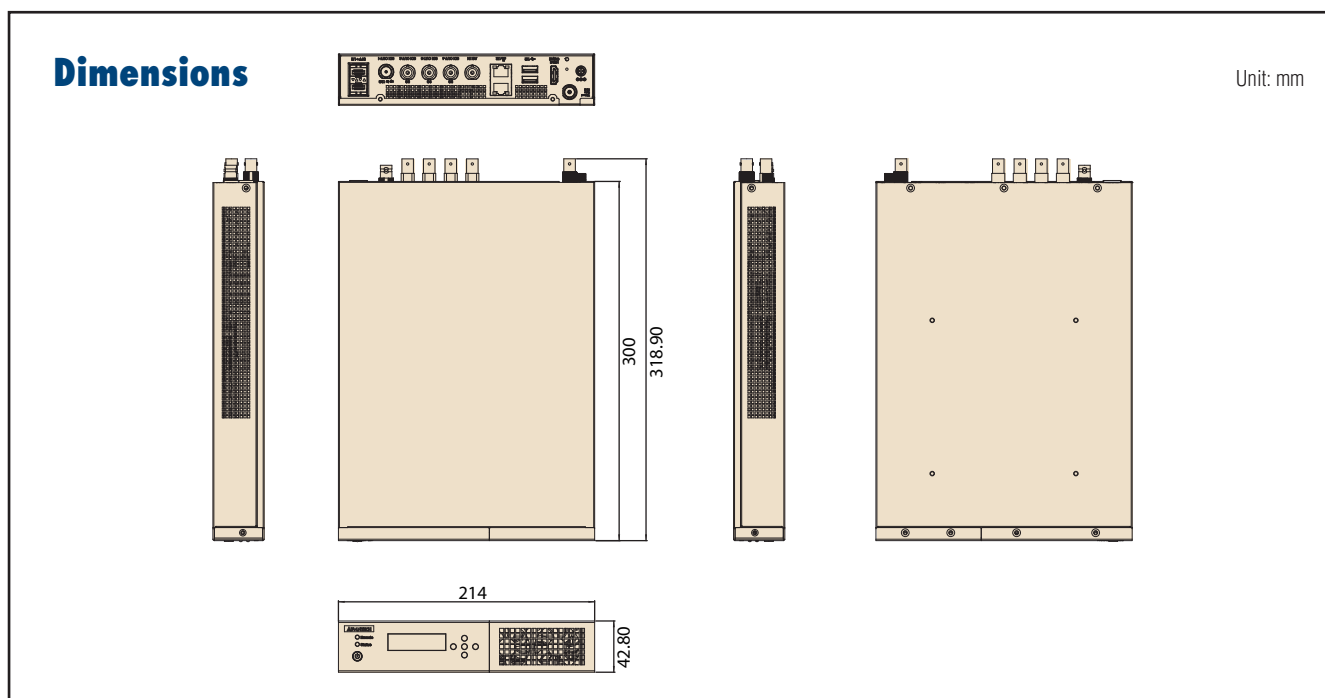
SMALL FORM FACTOR

The Half-1U chassis is designed to support flexible operational deployment. Only half the width of a standard rack mount 1U chassis and consuming less than 100W power, VEGA-6311 can bring 4K/UHD performance into many space and power constrained applications.

READY FOR THE IP-CONNECTED FUTURE

The move to IP is a significant trend in the broadcast industry and VEGA-6311 is ready! It is capable of supporting the latest Video over IP streaming standards with dual 10Gigabit Ethernet links for SMPTE 2022/2110 Media over IP terminations.





Unit: mm

Specifications

System Processor	i7-6820EQ, i5-6440EQ, i3-6100E
Operating System	Windows, Linux
Video Coding	<p>H.265/HEVC</p> <ul style="list-style-type: none"> Profile: Main422 10, Main 10, Main Level: 5.1, 4.1, 4.0, 3.0 Resolution (Frequency): 2160p x 4096 (50/59.94Hz), 1080p x 1920 (50/59.94Hz), 1080i x 1920 (50/59.94Hz), 720p x 1280 (50/59.94Hz), 480i x 720 (59.94Hz), 576i x 720 (50Hz) <p>H.264/MPEG-4 AVC</p> <ul style="list-style-type: none"> Profile: High422, High, Main Level: 4.2, 4.0, 3.0 Resolution (Frequency): 1080p x 1920 (50/59.94Hz), 1080i x 1920 (50/59.94Hz), 720p x 1280 (50/59.94Hz), 480i x 720 (59.94Hz), 576i x 720 (50Hz) <p>MPEG-2</p> <ul style="list-style-type: none"> Profile: 422, High Level: High, Main Resolution (Frequency): 1080i x 1920 (50/59.94Hz), 720p x 1280 (50/59.94Hz), 480i x 720 (59.94Hz), 576i x 720 (50Hz)
Audio Coding	MPEG-2 AAC LC, MPEG-4 AAC LC, MPEG-4 HE-AAC V2, MPEG-4 AAC-ELD 8ch, 5.1ch
Ancillary Data	SMPTE 2038, SMPTE 334, SMPTE RD 11, CEA-608/708, ARIB STD-B40
Streaming Protocol	RTP, UDP, Unicast, Multicast (IGMPv3/IPv4, MLDv2/IPv6)
Error Correction (IP)	FEC, ARQ, SMPTE 2022-1
Audio & Video I/F	4 x 3G/HD/SD-SDI (or 1 x 12G SDI) 1 x HDMI output 2 x GbE RJ45 port 2 x 10GbE SFP+ modules for ST2022/ST2110 I/F
Streaming I/F	2 x 10BASE-T/100BASE-TX/1000BASE-T (Stream & Control) 1 x DVB-ASI input
Time Sync.	Bi-level or Tri-level
USB Port	2 x USB3.0 port
PCIe Bus	Gen3 x 8
Storage	M.2 SSD
Misc. Functions	File reproduction
Dimensions/Weight	214 (W) x 281 (D) x 42.8 (H) mm/Approx. 1.8kg
Temp/Humidity	0 ~ 45°C/20 ~ 90RH (No condensation)

* The specifications are subject to change without notice.