

MODEL VEC500

UHD/HD/SD VIDEO ENCODER OEM MODULE

FEATURES

- Real-time, high-quality, lowlatency encoding for video-over-IP applications
- Standards-based, H.264 and H.265 algorithms
- Optional Ultra low-latency, visually lossless JPEG-XS
- Resolutions up to 4K
- Supports UHD/HD/SD-SDI and MIPI CSI-2 Formats
- Transmit video at rates as low as 64Kbps up to 1Gbps
- RTSP/RTP/UDP, TS/UDP, SMPTE-2110, SRT/RIST Protocols
- MISB-Compliant
- Fully configurable network interface
- AES Encryption
- GPS/IRIG/PTP/NTP Time Sync
- Serial and Ethernet Metadata
- Serial or Ethernet port configurable
- Compact, rugged module, including extended temperature (-40°C to +71°C) version



The Model VEC500 UHD/HD/SD Video Encoder Module provides a modular solution for camera and sensor manufacturers to add video streaming to their devices. The module is a network appliance designed to compress Ultra High Definition (UHD), High Definition (HD), and Standard Definition (SD) video (UHD/HD/SD-SDI, MIPI CSI-2) for transmission over IP networks. The unit converts cameras and sensors to Ethernet compatible devices for any remote monitoring application including security, surveillance, broadcast, and distance learning.

Utilizing industry-standard H.264/H.265, or low-latency JPEG-XS compression, along with flexible adjustments for video resolutions, compression parameters, and network settings, the VEC500 can be optimized to deliver high-quality video over any network. The unit is easily configured via the Ethernet or serial port, with support for metadata channel multiplexing. The VEC500 is compliant with off-the-shelf video players and most decoding hardware, including Delta's decoders.

This compact, rugged module is capable of operation in harsh environments. Extended temperature operation, SRT/RIST support, and AES encryption makes it ideal for military, law enforcement, and traffic monitoring applications.

UHD/HD/SD VIDEO ENCODER OEM MODULE

VIDEO INPUT

Format SDI (SMPTE)/MIPI CSI-2
Connector MCX/Multi-pin Header

VIDEO COMPRESSION

Algorithms H.264/H.265/JPEG-XS (Option)

Format H.264: BP,MP,HP Level 5.1, 4:2:2, 8-Bit

H.265: MP,M10P Level 5.1, 4:2:2, 8/10-Bit

JPEG-XS: 4:2:2, 8/10-Bit

Resolutions 2160p/1080p/720p/1080i/480i/576i

Frame Rate 25/29.97/30/50/59.94/60

Scale/Crop HH/HV/CIF/ROI

STREAMING INTERFACE

Ports GbE

Protocol MPEG-2 Transport Stream

RTSP/RTP SRT/RIST

Data Rate 64Kbps to 1GbpsConfiguration DHCP or Static Address

Selectable Ports

Auto Sense Full/Half Duplex

Unicast/Multicast 10-pin Header

METADATA INTERFACE

Format SDI VANC/RS-232/Ethernet

Protocol KLV/Clear

Connector MCX (SDI)/10-pin Header

CONTROL

Connector

Format Serial/Telnet/Web Browser

Protocol Delta's 3-character mnemonics/HTML/https/

SSH/SNMPv3

Connector 10-pin Header

TIME INPUT/OVERLAY

Protocol GPS/IRIG-B (DC)/PTP/NTP

Connector 10-pin Header

ENCRYPTION

Algorithm AES-128/256

ENVIRONMENTAL

Temp (Op) Commercial (12Gb): 0°C to +71°C

Industrial (10Gb): -40°C to +71°C

Temp (Storage) -55°C to +85°C

Humidity 5%-95% RH, non-condensing

POWER

Volts +9-36VDC (12VDC Nominal)

Watts 10W

Connector 4-pin Header

SIZE

Dimensions 3.03"W x 2.36"D x .84"H

77.0mm x 60.0mm x 21.3mm

Weight 3.6oz (102g)







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