HCoder™ 4-16ch HD-SDI+HDMI/IP
Real time Linux® based multichannel
HDMI AVC/H.264 audio and video HD
live encoder with 4 to 16 HD-SDI and/or
HDMI inputs and 4 to 16 IP outputs.
Supports input and output resolutions up
to 1080p at 60 fps. Streams to Ustream
and Atlas™, Wowza®, and Adobe®
Flash® Servers. Optional HD-SDI
and/or HDMI and CVBS version
available.

Features
• Inputs: Simultaneously captures up to 16 HD-
SDI and/or HDMI inputs (Ships with HD-SDI to
HDMI adapters)
• Outputs: 16 simultaneous IP TS streams (RTMP
or UDP)
• Outputs two RTMP streams per channel (main
stream & 2nd Stream) to different media servers
• IP output protocols: RTMP, RTSP, UDP, HTTP,
HLS, FLV and ONVIF
• Output resolutions: 1920x1080, 1680x1056,
1280x720, 1024x576, 720x540, 720x480, 720x404, 704x576,
640x480, 640x360, 608x448, 544x480, 480x480, 480x384,
480x360, 480x320, 480x272, 480x270, 400x320,
400x224, 352x480, 352x228, 320x256, 320x240,
320x180, 240x180, 176x144
• Audio encoding: AAC
• Adjustable output stream bit rate – 0.1 to 32
Mbps
• Can insert text and .BMP photos as stream logo
for main stream & second stream
• Remotely manageable
• Supports firmware upgrades
• Low power consumption – 90 watts
• Optional version available with 4 to 16 HD-SDI
and/or HDMI inputs plus 4 to 16 CVBS inputs

Applications
• reEncoding content for Dormitories and
Apartments
• Streaming video to CDNs and web sites like
Ustream®, Akamai®, Octoshape™,
Verizon®, etc.
• NVR (Net Video Recorder)
• University or corporate training webcasts
• Hotel or cruise ship TV systems
• Video Conferencing
• Digital Signage

Overview
HDMI is the low cost connection for digital uncompressed video.
Many video devices including cameras, DVD players, and video
stream decoders output HD via HDMI to television sets. HD-SDI is
the most popular infrastructure within most modern production
studios in the world. It is tried and true and does not create
generational losses.

H.264 has become the de facto standard for delivering video over IP.

DVEO's new H.264 HD audio & video encoder, the HCoder 4-16ch
HD-SDI+HDMI/IP, is a cost effective 4 to 16 channel HDMI to IP
and/or HD-SDI to IP encoder. It encodes up to 16 simultaneous
HD-SDI and/or HDMI inputs, then streams up to 16 IP streams to
CDNs and web sites like Ustream®, Akamai®, Octoshape™,
Verizon®, etc. IP protocols can be RTMP, RTSP, UDP, HTTP,
HLS, FLV Stream Protocols and/or ONVIF.

The system includes remotely manageable Windows® based
software. Audio encoding is AAC.

Block Diagram
**Inputs/Outputs**

**HD-SDI+HDMI to IP**

4-16 HDMI and/or HD-SDI Inputs (via HD-SDI to HDMI adapters)  
4-16 IP Output Ports

**Optional HD-SDI+HDMI CVBS to IP**

4-16 HDMI and/or HD-SDI Inputs (via HD-SDI to HDMI adapters)  
4-16 HDMI Inputs, 4-16 CVBS Inputs, 4-16 IP Output Ports

**Specifications**

**Video Encoding**

| Inputs: | 16 simultaneous HD-SDI and/or HDMI inputs  
|         | (Ships with HD-SDI to HDMI adapters)  
|         | Option: Additional 16 CVBS inputs  
| Encoding: | H.264/AVC High Profile Level 4.0  
| HDMI Input Resolutions: | Maximum resolution 1920 x 1080p@60 Hz  
| Data Rate: | 0.1 to 32 Mbps  
| Rate Control Modes: | CBR, VBR  
| GOP Structure: | IBBP  
| Advanced Pretreatment: | De-interlacing, Noise Reduction, Sharpening

**Audio Encoding**

| Encoding: | AAC  
| Sampling Rate: | Auto  
| Bit Rate: | 48K/64K/96K/128K/160K/192K  
| Sampling Precision: | 24 bit  
| Data Rate: | 64 Kbps~384 Kbps

**IP Outputs**

| Outputs: | 16 simultaneous IP streams  
| Interface: | 100 Base-T Ethernet  
| Resolution: | Maximum resolution 1920 x 1080p@60 Hz  
| Protocols: | RTMP, RTSP, UDP, HTTP, HLS, FLV, ONVIF  
| Optional HDMI+CVBS version: | Maximum resolution 1920 x 1080p@30 Hz, 720p@60 Hz  
| Optional HDMI+CVBS version: | RTMP, RTSP, UDP, HTTP, ONVIF

**System**

| HDMI+CVBS Option: | Web default IP – 192.168.0.31

**Physical and Power**

| Dimensions (W x D x H): | 19 x 11.8 x 5.24 inches (483 x 300 x 133 mm)  
| Weight: | 14.33 lbs (6.5 Kg)  
| Power Supply: | 110-220V  
| Power Consumption: | 90W  
| Conformities: | FCC, CE

**Ordering Info**

HCoder XX HDMI/IP: XX = Number of Channels  
HCoder XX HD-SDI/IP: Ships with HD-SDI to HDMI adapters  
CVBS option – HCoder 4-16ch HD-SDI+HDMI+CVBS/IP