



## HD Encoder Card: (for DVIS / DVISm / DVISf / DigiVu / DigiVu Mini / DigiVu CD Platforms)

- ▶ MPEG-2 & H.264 (AVC/MPEG-4 Part 10) HD encoding
- ▶ Cost-effective HD encoding for headend/hub applications, locally generated MDU content, PEG channels
- QAM, IP & PON overlay/RFoG output
- ▶ Scalable HD encoding:
  - QAM Output: up to 3 HD programs in DVISm/DigiVu Mini & up to 5 HD programs in DVIS/DigiVu/DigiVu CD
  - ▶ IP Output (copper/fiber): up to 2 HD programs in DVISm/DigiVu Mini & up to 4 HD programs in DVIS/DigiVu/DigiVu CD
  - ▶ PON Overlay/RFoG Output: up to 5 HD programs in DVISf
- Spectrum efficient & compact HD encoding with all HD programs multiplexed onto single QAM (format dependent)
- ▶ Possibility of mixing HD & SD encoder cards within one platform, creating best spectrum usage for QAM transport
- ▶ Hot-swappable 1-channel HD encoder card
- ▶ All other DVIS/DVISm/DVISf/DigiVu/DigiVu Mini/DigiVu CD features/specs apply





## **Ordering Information**

	Description
DV1HDA	1-channel HD Encoder Plug-in Card (Comp/VGA)
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## **HD Encoder Card:** (for DVIS / DVISm / DVISf / DigiVu / DigiVu Mini / DigiVu CD Platforms)

## **HD Encoder Card Specifications**

HD/SD ENCODER CARD SPECIFICATIONS	DV1HDA	
VIDEO INPUTS		
COMPONENT		
CONNECTOR	3x RCA Female	
CHROMA FORMAT	YPbPr 4:2:2	
	480p_60 (59.94)	
	576p_50	
RESOLUTIONS	720p_60 (59.94)	
	720p_50	
	1080i_60 (59.94)	
	1080	oi_50
PC - VGA	DE 45.5	45 B: 0 B
CONNECTOR CHROMA FORMAT	DE-15 Female, 15-Pin, 3 Rows RGB 4:4:4	
OTINOMA I ORMAI		
	640 x 480, 60 Hz 800 x 600, 60 Hz	
	1280 x 720, 60 Hz	
	1024 x 768, 60 Hz	
RESOLUTIONS	1280 x 1024, 60 Hz	
	1366 x 768, 60 Hz	
	1400 x 1050, 60 Hz	
	1920 x 1030, 60 Hz	
AUDIO INPUTS		·
ANALOG L/R		
CONNECTOR	TRS 3.5 mm Female, 2	x RCA Adapter Female
DIGITAL SPDI/F		
CONNECTOR	1x RCA (Coaxial) Female	
AUDIO STANDARD	IEC 61937:AC3 (Pass Through)	
MAX CHANNELS	6 (5.1) Pass Through	
VIDEO PROCESSING		
ENCODING	MPEG-2	H.264
ENCODE LEVEL	MPEG-2 HD MP @ HL	High Profile Level 5
ENCODE LEVEL CHROMA	MPEG-2 HD MP @ HL 4:2:0	High Profile Level 5 4:2:0
	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps	High Profile Level 5 4:2:0 1-25 Mbps
ENCODE LEVEL CHROMA	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94)
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0_50
ENCODE LEVEL CHROMA	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0 (59.94)
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0 (59.94) 0 (59.94)
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0 (59.94) 0 (59.94) 0 (59.94)
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60	High Profile Level 5 4;2:0 1-25 Mbps (59.94) 0,59.94) 0,59.94) 0,59.94) i,50
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 575g 720p_60 720p 1080i_60	High Profile Level 5 4:2:0 1-25 Mbps (59.94) 0 (59.94) 0 (59.94) 0 (59.94) 0 (59.94) 0 (69.94) 0 (60 Hz
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 1080 640 x 48	High Profile Level 5 4:2:0 1-25 Mbps (59.94) 5 50 (59.94) 5 00 (59.94) 6 50 0 (59.94) 6 50 0 (60 Hz 0, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_66 1080 640 x 48	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0 50 0 (59.94) 0 (59.94) 0 (59.94) 0 (60 Hz 0, 60 Hz 20, 60 Hz
ENCODE LEVEL CHROMA BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 1080 640 x 48 800 x 60 1280 x 72	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0 (59.94) 0 (59.94) 0 (59.94) 0 (59.94) 0 (60 Hz 0, 60 Hz 20, 60 Hz 88, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 640 x 48 800 x 60 1280 x 72 1024 x 76	High Profile Level 5 4:2:0 1-25 Mbps 0 (59.94) 0 50 0 (59.94) 0 50 0 (59.94) 0 60 Hz 0, 60 Hz 20, 60 Hz 24, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 1080 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10	High Profile Level 5 4:2:0 1-25 Mbps 1(59.94) 2.50 1(59.94) 2.50 1(59.94) 1.50 1(59.94) 1.50 1,60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 1080 640 x 48 800 x 60 1280 x 72 1024 x 77 1280 x 10	High Profile Level 5 4:2:0 1-25 Mbps 0(59.94) 0.50 0(59.94) 0.550 0(59.94) 0i_50 0, 60 Hz 0, 60 Hz 24, 60 Hz 38, 60 Hz 56, 60 Hz 56, 60 Hz 56, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 1080 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10	High Profile Level 5 4:2:0 1-25 Mbps 0(59.94) 0.50 0(59.94) 0.550 0(59.94) 0.550 0(69.94) 0i_50 0, 60 Hz 0, 60 Hz 20, 60 Hz 24, 60 Hz 28, 60 Hz 80, 60 Hz 80, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VGA RESOLUTIONS  VIDEO PID SETTING	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 1080i_61 1080 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10	High Profile Level 5 4:2:0 1-25 Mbps 1(59.94) 2.50 0(59.94) 0.550 0(59.94) 0.550 0(69.94) 0i_50 0, 60 Hz 0, 60 Hz 20, 60 Hz 28, 60 Hz 28, 60 Hz 28, 60 Hz 80, 60 Hz 80, 60 Hz 80, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VGA RESOLUTIONS  VIDEO PID SETTING VBI PROCESSING AUDIO PROCESSING	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 1080i_60 1080 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F	High Profile Level 5 4:2:0 1-25 Mbps 1(59.94) 2.50 0(59.94) 0.550 0(59.94) 0.550 0(69.94) 0i_50 0, 60 Hz 0, 60 Hz 20, 60 Hz 28, 60 Hz 28, 60 Hz 28, 60 Hz 80, 60 Hz 80, 60 Hz 80, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VGA RESOLUTIONS  VIDEO PID SETTING VBI PROCESSING AUDIO PROCESSING AUDIO ENCODER	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_60 1080 640 x 48 800 x 60 1280 x 7; 1024 x 7; 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F	High Profile Level 5 4:2:0 1-25 Mbps 1(59.94) 2.50 1(59.94) 2.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1(59.94) 3.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VIDEO PID SETTING VBI PROCESSING AUDIO PROCESSING AUDIO ENCODER ENCODE STANDARD	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576g 720p_60 720p 1080i_60 1080 640 x 48 800 x 60 1280 x 72 1024 x 72 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F Closed 0	High Profile Level 5 4:2:0 1-25 Mbps 0(59.94) 0.50 0(59.94) 0.550 0(59.94) 0.550 0,60 Hz 0,60 Hz 24, 60 Hz 24, 60 Hz 88, 60 Hz 80, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VIDEO PID SETTING VBI PROCESSING AUDIO PROCESSING AUDIO ENCODER ENCODE STANDARD SAMPLE RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 5766 720p_60 1080i_60 1080c 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F Closed 0	High Profile Level 5 4:2:0 1-25 Mbps 1(59.94) 0.50 0 (59.94) 0.550 0 (59.94) 0.50 0 (69.94) 0.50 0 (60 Hz 0, 60 Hz 20, 60 Hz 24, 60 Hz 38, 60 Hz 50, 60 Hz 80, 60 Hz
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VIDEO PID SETTING VBI PROCESSING AUDIO PROCESSING AUDIO ENCODER ENCODE STANDARD SAMPLE RATE BIT RATE	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_61 1080 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F Closed 0 Dolby® Digital AC- 48 i	High Profile Level 5 4:2:0 1-25 Mbps 0(59.94) 0(59.94) 0(59.94) 0(59.94) 0(59.94) 0(60 Hz 0, 60 Hz 20, 60 Hz 24, 60 Hz 28, 60 Hz 28, 60 Hz 28, 60 Hz 28, 60 Hz 38, 60 Hz 384 Kbps
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VIDEO PID SETTING VBI PROCESSING AUDIO PROCESSING AUDIO ENCODER ENCODE STANDARD SAMPLE RATE BIT RATE AUDIO PID SETTING	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 5766 720p_60 1080i_60 1080c 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F Closed 0	High Profile Level 5 4:2:0 1-25 Mbps 0(59.94) 0(59.94) 0(59.94) 0(59.94) 0(59.94) 0(60 Hz 0, 60 Hz 20, 60 Hz 24, 60 Hz 28, 60 Hz 28, 60 Hz 28, 60 Hz 28, 60 Hz 38, 60 Hz 384 Kbps
ENCODE LEVEL CHROMA BIT RATE  COMPONENT VIDEO RESOLUTIONS  VGA RESOLUTIONS	MPEG-2 HD MP @ HL 4:2:0 1-25 Mbps 480p_60 576p 720p_60 720p 1080i_61 1080 640 x 48 800 x 60 1280 x 72 1024 x 76 1280 x 10 1366 x 76 1400 x 10 1920 x 10 Yes (0x0015-0x1F Closed 0 Dolby® Digital AC- 48 i	High Profile Level 5 4:2:0 1-25 Mbps 1(59.94) 0.50 0 (59.94) 0.550 0 (59.94) 0.50 0 (59.94) 0.50 0 (60 Hz 0, 60 Hz 24, 60 Hz 24, 60 Hz 80, 60 Hz

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