DBS Sapphire DEC5 HEVC Decoder

Sapphire HEVC Decoder is a broadcast quality h.265 Decoder, offering exceptional compression ratios on video resolutions up to 4K UHD.

The Sapphire DEC5 decoder is a compact but feature rich professional broadcast decoder able to receive ASI or a variety of IP formats including SRT. HEVC offers superior video quality and enables formats up to UHD/4K with support for HDR, with down scaled monitoring output. Alternatively when paired with a Domo encoder, 4x HD channels can be decoded and using Quad-Sync these feeds do not have to be synchronized or the same video format but they do need to be the same frame rate.

ASI loop though enables decoding of individual channels in a multiplex and daisy changing multiple decoders together. Up to 8 stereo pairs of audio can be supported and output embedded on SDI, there is also provision for 2 stereo pairs of analogue audio. Optional encryption of BISS-2 can be enabled to protect valuable content and there is an SFP cage for optional ST2110, Fibre or HEDMI output. There is a genlock input for studio synchronisation while control is via intuitive front panel or the Ethernet port.

The DEC5 decoder is an ideal partner to the Sapphire RXD5 COFDM receiver. The RXD5 can demodulate 4 separate wireless camera frequencies and natively decode 1. With the addition of 3x DEC5 decoders it is possible to receive and decode up to 4 wireless camera transmitters in 2U of rack space. The DEC5 is also ideal for remote production, receiving feeds over leased lines or satellite and handling 1x UHD/4K or 4x HD feeds with ultra-low latency.

FEATURES

Ultra low end to end latencies

Support for true UHD/4K signals with HDR

Decoding of 4x HD signals in single unit

Highly compact, 3 fit in 1RU rack space

IP and DVB-ASI input

SRT decoding

Optional ST2110 interface via SFP

Up to 50% bit-rate reduction compared to H.264

DOMO BROADCAST SYSTEMS

For the moments that matter

Connectors

Video Out 1-4	3G / 12G SDI HD-BNC x 4
ASI Out	HD-BNC
Genlock	HD-BNC
Stream 1/2 & Control	1000Base-T Ethernet RJ45
Control	1000Base-T Ethernet RJ45
Analogue Audio In/Out	4x Hirose 6-way (F) Optional

Video Decoder

Profiles	4K UHD. 4:2:2/4:2:0, 8/10-bit
	2160p / 23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60
	HD. 4:2:2/4:2:0, 8/10-bit
	720p / 50 / 59.94 / 60
	1080i / 50 / 59.94 / 60
	1080p / 23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60

Audio Decoder

Format	Embedded
Decoder	8 pairs LPCM/MPEG1-L1/MPEG1-L2

Stream Inputs/Outputs

DVB_ASI	
IP Interface	1 × 1000Base-T Ethernet
IP Stream Format	Unicast/Multicast/UDP/RTP/SRT
IP Stream Rate	75Mb/s maximum

HDR/WGC Support

Rec. ITU-R BT2100-2 (PQ and HLG)	
Rec. ITU-R BT2020	

Control

Front Panel Touch-Screen	
Remote	IP web-browser Control │ RS232

Power

DC In	7-32V