

SAPPHIRE HEVC

Exceptional quality HEVC encoder with DVBT COFDM transmitter, in a slimline lightweight package.

Ideal for mounting on smaller cameras or unmanned aerial vehicles. With 12G / 3G input the Wave's Sapphire transmitter can be connected direct to HD or UHD equipment. The Wave's Sapphire transmitter has analogue audio inputs and up 4 pairs of embedded audio.

Automatic support for HD HDR is provided.

RF Key Points

- COFDM Ultra long range RF
- DVBT & UMLV
- 100mW Transmit Power

KEY BENEFITS

- High Dynamic Range (HDR) Compatible
- HEVC 10 bit 4:2:2 h.265 Encoding
- Accepts all HD SDI formats
- Metadata passthrough
- Ultra Low latency
- Upgradeable to UHD 4K
- Rugged design and build quality
- Interchangeable RF Modules



SAPPHIRE HEVC | KEY FEATURES

Connectors

RF out	SMA(f)
Video in	HD-BNC
Analogue audio in	Lemo 0B 5 pin Female
Power	Lemo 0B 4 pin Female
Data / Ethernet	10 pin

RF

Frequency Band Options	2-2.9GHz, 5.5-6GHz
O/P Power	100mW
DVB-T Bandwidth	8MHz, 7MHz and 6MHz modes
DVB-T Guard	1/32, 1/16, 1/8, 1/4
DVB-T FEC	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T Modulation	QPSK, 16QAM, 64QAM
DVB-T Bit-rates	3.6Mbps to 40Mbps
Other Modulations	UMVL, Dual Pedestal

Video

Input	HD-SDI
Output	Loop through SDI feed
Video Coding	H.265
Encoding Format	H.265 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
Latency	<sub 35ms
HDR/WGC	Rec. ITU-R BT.2100-2 (PQ and HLG) and Rec. ITU-R BT.2020
Auxiliary Data	Timecode and Aux data extraction

Audio

Format	Embedded, 1 pair analogue +48v Phantom
Encoder	MPEG-1 Layer 2, Linear PCM, AAC-LC
Quantity	2 pairs

Control

Remote	IP web browser Control
Ethernet	RJ45 1000/Base-T/100bT

Data

Data	1.2k to 115.2k baud, 8-bit
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Dimensions

Size (WxDxH)	75 x 75 x 30 mm
Weight	270g
Mounting	3mm Mounting holes

Power

DC In:	9 – 36V Reverse polarity protection
Connector	0B 4 Pin Lemo
Power consumption	13W

Environment

Temperature Range	-10 to +50 °C
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Product Codes

NanoHEVC-200290	NanoHEVC TX 2-2.9GHz
NanoHEVC-550600	NanoHEVC TX 5.5-6GHz
LIC-4K	Add 4K Encoding (12G only)

