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HEVC HDR

10 BIT

## Engineered for the film industry

#### Exceptional picture quality using HEVC encoding, reliable COFDM RF, ultra low latency and 4 RF inputs with MRC technology.

Our Helios RX ULTRA rack mounted receiver allows decoding of both H.264 or HEVC systems giving a future proof platform that will work with legacy systems.

The large touch screen allows easy access and control and the web GUI enables remote control of the system.

Complimented with up to 4 x HD-SDI outputs (HD mode) that can be switched to 12G in when 4K decoding (license upgrade). The Helios RX-ULTRA supports onward streaming over SRT and other IP protocols.

#### Video Key Points

- 10 bit 4:2:2 video
- 12g UHD Output
- Rack mounted receiver system
- HEVC H.265 decoding
- 4 way MRC diversity receive antennas
- Ultra Low-Latency
- 4K UHD processing
- Support for HD HDR
- Timecode signal insertion
- LUT
- Web browser control
- High Dynamic Range (HDR)
  Compatible
- Metadata passthrough
- Enhanced colour depth
- Crystal clear clarity

#### **RF Key Points**

- COFDM Ultra long range RF
- DVB-T
- Licenced frequencies
- Does not take up valuable wifi channels on set
- Paired with the RW downconverters creates exceptional RF perfomance

#### The Helios range

The Helios range from Rogue Waves is designed from years of experience in broadcast and film industries using wireless systems, we have specifically constructed each component to be practical for the unpredictability of a film and TV set, while keeping it rugged and lightweight at the same time.

Using 10bit 422 sampling and bonded with low latency HEVC encoding allows for an exceptional video signal to be carried through the air with no visual loss, even when transmitting HDR or Camera native log images (S-Log, C-Log, 3G10, etc.)

A license upgrade allows the Helios\* to transform into a 4K UHD system, using a 12G input from professional film and broadcast cameras.

\*specific products only



### Specifications

Connectors	
12G/HDSDI	4 x HD-BNC Female 75 ohm
SFP	1 x SFP Interface
ASI Out	BNC Female 75 ohm
Genlock In	BNC Female 75 ohm
RF In	8 x BNC Female
Audio Out	2 x XLR Male 3 pin
Control	RJ45
Stream	RJ45
Data Power 12V In	Hirose XLR Male 4 pin
RF	
UHF Inputs	8 off UHF Maximum Ratio Combining
Tuning Step Size	250kHz
DVB-T Modulation	
DVB-T Bandwidth	Dual Ped, 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
Video	
Video Coding	H.265 and H.264 (Sapphire-RXD2D version only)
Input Format H.264	1920x1080p 60/59.94/50Hz
	1920x1080i 60/59.94/50Hz
	1920x1080p 30/29.97/25/24/23.97Hz
	1920x1080psf 30/29.97/25/24/23.97Hz
	1280x720p 60/59.94/50Hz
Input Format HEVC 4	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
	1080psf 23.98/24/25/29.97/30
Monitor	
SFP	MSA or non-MSA modules
	12G-SDI secondary output for monitoring including down sampling to HD
Power Consumption	20W

HDR/WGC	
We support	Rec. ITU-R BT.2100-2 (PQ and HLG) Rec. ITU-R BT.2020
Audio	
Format	Embedded
Decoder	MPEG-1 Layer 1, MPEG-1 Layer-2, Linear PCM
Quantity	8 pairs
Analogue	Line Level (+18/+24 dBu)
DVB ASI	
Transport stream	to 100Mb/s
IP Streaming	
Formats	Unicast / Multicast / UDP / RTP / SRT
Bitrate	50Mb/s maximum
Genlock	
Tri Level / Black Bui	rst
Genlock	
Tri Level / Black Bui	rst
Indicators	
Display	High Brightness IPS/TFT with touch screen control
Control	
Local	Touch Screen
Remote	IP web browser Control
Dimensions	
Size (WxDxH)	½ 19" 2RU
Weight	4Kg
Mounting	Side-by-side mount kit available as an option
Cooling	Front to rear forced air
Power	
Power In:	12V DC
	50-80W depending on number of downconverters

# $\begin{array}{c} \mathbf{Overview} \\ - \\ | \longleftrightarrow | \qquad (((\circ))) \end{array}$

**Ultra Long** Range COFDM

**Ultra Low** Delay

HEVC





Unlimited simultanious receivers



#### Dimensions



w: 417mm

w: 210mm

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