rogue waves



Engineered for the film industry

The Rogue Waves UHF Downconverter with internal bandpass filter

Designed to improve RF performance the DC-PRO has the option of upto two internal bandpass filters that are operated by a button on the unit to switch between modes. Being able to remove interference from wifi and mobile phones the filtering is imperative for any location be it a city centre or studio complex.

Key points

- 1.98-2.7GHz
- Internal bandpass filtering
- Hi / Lo gain switch
- Manual LO option
- 9-40v input range

Bandpass Options (S-Band)

- 2.0-2.1GHz
- 2.2-2.3GHz
- 2.2-2.4GHz
- 2.5-2.7GHz

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.

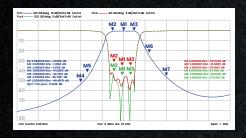
Using 10bit 422 sampling and bonded with low latency HEVC encoding allows for an exceptional video signal to be carried through the air with no visual loss, even when transmitting HDR or Camera native log images (S-Log, C-Log, 3G10, etc.)

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

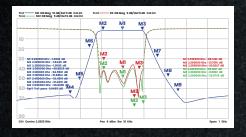
*specific products only



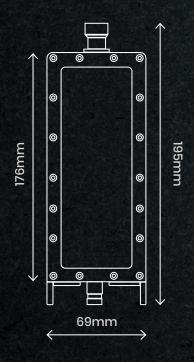
Narrowband View of 2.0-2.1GHz Filter



Narrowband View of 2.2-2.4GHz Filter



Dimensions



Specifications

RF	
Frequency Range (RF)	1980-2700MHz
RF Input Power (dBm)	Maximum ImW (0dBm) in low gain
Output PldB	+20dBm (high gain), +3dBm (low gain)
Output IP3	+33dBm (high gain), +16dBm (low gain)
Output Frequency (IF)	180-900MHz @ 1800MHz LO
	80-800MHz @ 1900MHz LO
	100-820MHz @ 2800MHz LO
	150-870MHz @ 2850MHz LO
	200-920MHz @ 2900MHz LO
Gain (Switchable)	18dB nominal (low gain)
	43dB nominal (high gain)
Noise Figure @ 25oC	3.5dB (high gain)
LO Frequency (MHz) (Switchable)	1850MHz (DEFAULT), 1800MHz, 1900MHz, 2800MHz, 2850MHz, 2900MHz, CUSTOM
LO Setting Accuracy @ 25oC	±2.0ppm
LO Frequency Stability (-40+85oC)	±1.0ppm
LO Frequency Stability (Aging)	±1.0ppm/year
Phase Noise @ 1850MHz LO	-91dBc/Hz @1kHz
	-107dBc/Hz @ 10kHz
	-104dBc/Hz @ 100kHz

	-104dBc/Hz @ 100kHz
Electrical Specification	
Dimensions (mm) (LxWxH)	176x69x26mm without bracket
	195x69x36mm with bracket and connectors
Current Consumption (mA at 9Vin)	400mA (Low Gain), 450mA (High Gain)
Power Consumption (Watts)	3.5-4.1W nominal
Connectors	
Input Connector and Impedance	N-Type female 50Ω
Output Connector and Impedance	BNC, 75Ω
Mechanical Specification	
Size (WxDxH)	113 x 88 x 27 mm
Enclosure Material	Milled Aluminium
Enclosure Colour	Black Anodised
Mounting Options	Bracket attached to bottom (see section 5)
Mass (grams)	515grams (with bracket)
	480grams (without bracket)

^{*} Subject to change

IP Rating