

HC4 HELI-CODER 4

High Power Transmitter

> Applications

- Wireless High Speed Data Transmission (Data/Video/Audio)
- Airborne Applications
- High Quality ISR Video

> Features

- H.264 Encoding
- Transmission of SD and HD Video
- Ethernet Port for IP Streaming
- 5W/10W COFDM Transmission
- Control Panel Available as a Separate Unit*
- 28V for Use in Aircraft
- Monitoring of Power Out*, Channel*
- L, S and C-band Models
- BTP Encryption
- KLV Data Transport
- Other frequency bands available; contact factory

* External control panel must be ordered separately.

> Options

- AES or BISS Encryption
- MPEG2 Encoding



> Performance

Getting surveillance video and data to your users has never been easier. With the flexibility of MPEG-2 and H.264 compression, the HC4 seamlessly handles SD or HD video. The unit has an Ethernet port for transmitting streaming IP data.

The HC4 is a single box solution containing everything needed for high-quality, reliable transmission. This includes the video encoder, modulator, up-converter and high-power amplifier.

Standard COFDM modulation offers excellent performance in urban and Non-Line of Sight environments with significant multipath. Other optional high order modulation techniques are available through software changes, making this transmitter well suited to changing operational needs.

Additionally, this unit provides an integrated GPS data interface that reduces the components needed to integrate the HC4 into tracking systems. The HC4 provides everything required to achieve 10 W output power in an ultra-compact case. The remote control panel allows the electronics to be mounted within the avionics bay with full control from the flight deck.

The HC4 is also Geo-Point capable. Geo-Point uses metadata from the video source and displays the bearing and distance to the location shown on the screen, all in real time! (Geo-Point™ requires compatible receiver.)

BMS offers a wide selection of airborne products to meet the video and data requirements of today's real world applications. Call to discuss your specific needs.

> HC4 High Power Transmitter



Description

- 1 Camera
- 2 Heli-Coder IV
- 3 TX Antenna
- 4 RX Antenna
- 5 Diversity Receiver
- 6 Signal Output
- 7 DLC50 Control Panel

> Regulatory

- FCC Parts 74, 90, 101
- RTCA DO-160, designed to be compliant
- CE Mark

> Connectors

RF Out	N(f), 50 ohm
CVBS In (NTSC, PAL)	BNC(f), 75 ohm
SDI, HD-SDI In	BNC(f), 75 ohm
ASI In	BNC(f), 75 ohm
ASI Out	BNC(f), 75 ohm
GPS In (with optional DC Bias Out)	TNC(f), 50 ohm
Analog Audio In (2 channels)	D38999-26WC, 22-pin
Ethernet	M12
USB 2.0	Type A (Host)
ARINC 429 (optional interface)	D38999-26 WA355N
Power In	Souriau 3-pin male 851-02R12-3P50
Control Panel	Souriau (male) 10-pin
RS232 External AAAP	MIL-DTL-38999
RS232 KLV or Camera Metadata	
RS232 External GPS	

> Ordering Information

HC4-(xx)-H	H.264, SD/HD
HC4-(xx)-M	MPEG2, SD/HD
HC4-(xx)-MH	MPEG2/H.264, SD/HD

* where (xx) is center frequency in MHz

> Technical Characteristics

Frequency	2.0-2.5, 2.2-2.7, 4.4-5.0, 6.4-7.2 GHz (others avail.)	
Channel Bandwidth	6/7/8 MHz	
RF Output Power	5W/10 W switchable	
Modulation	<ul style="list-style-type: none"> • COFDM 2k • QPSK, 16/64 QAM • FEC 1/2, 2/3, 3/4, 5/6, 7/8 • Guard 1/4, 1/8, 1/16, 1/32 Other modulation available; consult factory	
Video Encoding	H.264 (MPEG2 option)	
Audio Encoding	MPEG 1, Layer II	
Channels	Two audios, multiple wayside data channels up to 115kbit/s	
IP Streaming	RTP-H.264 RTP-A RTSP UDP	Unicast or Multicast Unicast
Test Gen	Video/Audio	
Local Control	External Control Panel*	
Power Input	24 to 32 VDC (3 A @ 28 VDC)	
Consumption	85 W @ RF-Output 10 W	
Compliance	CE marked in accordance with EU Low Voltage and EMC Directives EMC Compliance: EN55022, EN55024	
Operating Temperature	- 15 to +65° C (5 to +149° F)	
Dimensions	5" W x 9" D x 6" H; 270 in. ³ (127 x 229 x 153) mm	
Weight	6 lbs. (2.73 kg)	
FCC	FCC product certification pending. Product will not sell or ship to commercial users without FCC certification.	

MODEL	PROFILE
HC4-H (H.264 only)	SD=MP@L4 HD=MP@L4; HP@L4
HC4-M (MPEG2 only)	SD=SP@ML; 422@ML HD=SP@HL
HC4-MH (H.264 and MPEG2)	MPEG2: SD=SP@ML; 422@ML HD=SP@HL H.264: SD=SP@L4; HI422@L4 HD=SP@L4