



HC4 HELI-CODER 4

High Power Transmitter



> Applications

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

> Features

- 5W/10W COFDM Transmission
- MPEG2 and H.264 Encoding
- L, S, and C-Band Models Standard
(Other frequencies available - contact factory)
- 28V for Use in Aircraft
- Transmission of SD and HD Video
- Ethernet Port for IP Streaming, Control, Configuration
- DLC50 Control Panel Available*
- BTP Encryption Standard (AES and BISS available)
- KLV and User Data Transport
- Avionics Mounting Tray Included

* External control panel must be

> Options

- AES or BISS Encryption
- DLC50 Avionics Control Panel
- Connector Kit
- Pre-fabbed Wiring Harness
- GA-35 GPS Antenna

> Performance

Conveying real-time surveillance video and data to your users has never been easier. The HC4 is a single box solution in an ultra-compact case containing everything needed for high-quality, reliable transmission. This includes the video encoder, modulator, up-converter and high-power amplifier.

The HC4 seamlessly handles SD or HD video with the flexibility of MPEG-2 and H.264 compression, and the unit has an Ethernet port for transmitting streaming IP data.

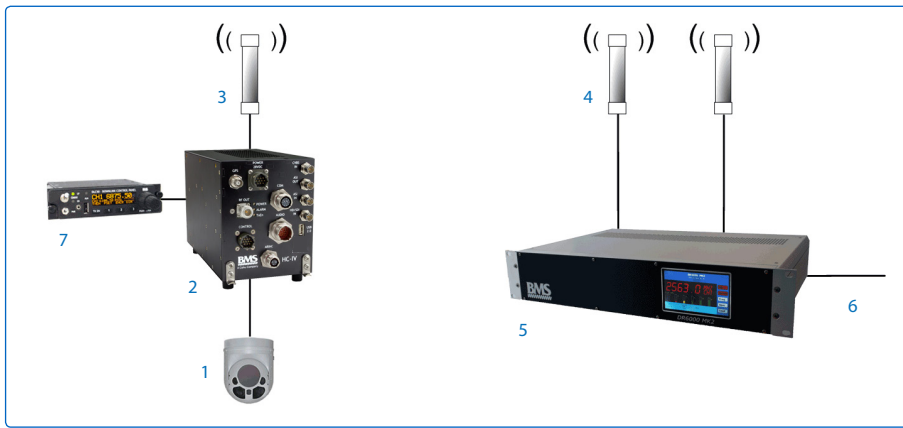
Standard COFDM modulation offers excellent performance in urban and Non-Line of Sight environments with significant multipath making this transmitter well suited to changing operational needs.

The HC4 is also compatible with the BMS DLC50 remote control panel which allows the transmitter electronic system to be mounted within the avionics bay with a simple, clear user interface on the flight deck.

The HC4 provides an integrated GPS data interface that reduces the components needed to integrate the transmitter into tracking systems. 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 of the CVIII or CV4 hand-held receiver, all in real time! (*Geo-Point™ requires a compatible receiver and a data interface in the aircraft. Contact BMS to see if your system is a candidate for Geo-Point.*)

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 4
- 3 TX Antenna
- 4 RX Antenna
- 5 Diversity Receiver
- 6 Signal Output
- 7 DLCS0 Control Panel

> Regulatory

- FCC Parts 74, 101
- RTCA DO-160 compliant

> Connectors

RF Out	N(f), 50 ohm
CVBS In (NTSC, PAL)	BNC(f), 75 ohm
SDI, HD-SDI In (with embedded audio and KLV metadata)	BNC(f), 75 ohm
ASI In	BNC(f), 75 ohm
ASI Out	BNC(f), 75 ohm
GPS Antenna (with adjustable DC Bias Out)	TNC(f), 50 ohm
Analog Audio In (2 channels)	D38999/20WC, 22-pin
Ethernet input	M12-4P
USB 2.0	Type A (Host)
ARINC 429 (Future)	D38999-20 WA35SN
Power In	Souriau 3-pin male 851-02R12-3P50
Control Panel	Souriau (male) 10-pin
RS232, three available for user data	D38999/20WB35SN

> Ordering Information

HC4-15-MH	1.3-1.5 GHz
HC4-23-MH	2.0-2.5 GHz
HC4-47-MH	4.4-5.0 GHz
HC4-64-MH	6.425-6.525 GHz
HC4-CONN-KIT	Mating connector kit
GA-35	GPS Antenna

* Contact factory for other frequencies

> Technical Characteristics

Frequency	1.3-1.5, 2.0-2.5, 4.4-5.0, 6.4-6.6 GHz (contact factory for other frequencies)		
Channel Bandwidth	6/7/8 MHz		
RF Output Power	5W/10 W switchable (factory programmable)		
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 		
Video Encoding	H.264 and MPEG2		
MPEG2 and H.264 Profiles	MPEG2: SD=SP@ML; 4:2:2@ML HD=SP@HL H.264: SD=SP@L4 HD=MP@L4 HD=HP@L4		
Video Resolutions	NTSC	480i	60
	PAL	576i	50
	HD-SDI	720P	30, 50, 59.94, 60
	HD-SDI	1080i	25/50, 30/60, 59.94
	HD-SDI	1080i-psf	23.98, 24, 25, 29.97, 30
	HD-SDI	1080p	23.98, 24, 25, 29.97, 30
Audio Encoding	MPEG 1, Layer II		
Channels	2 analog audio inputs 2 SDI embedded audio		
User Data	Up to three RS-232 channels, each up to 115 kB/s		
IP Streaming	RTP-H.264	Unicast or Multicast	
	RTP-A		
	RTSP	Unicast	
Test Generator	Video/Audio with heartbeat		
Local Control	External DLCS0 Control Panel*		
Remote Control	Either RS-232 or Ethernet		
Configuration	Web GUI (USB for software updates)		
Power Input	24 to 32 VDC (3.6 A MAX @ 28 VDC)		
Consumption	85-90 W @ 2-4 GHz, 101 W @ 6 GHz (RF-Output 10 W)		
Compliance	CE marked in accordance with EU Low Voltage and EMC Directives EMC Compliance: EN55022, EN55024 DO-160 Compliance Sections: 4, 5, 6, 7, 8, 16, 17, 20.4, 20.5, 25		
Operating Temperature	- 15 to +65° C (5 to +149° F)		
Dimensions	5" W x 9" D x 6" H; 270 in. ² (127 x 229 x 153) mm		
Weight	6 lbs. (2.73 kg)		

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