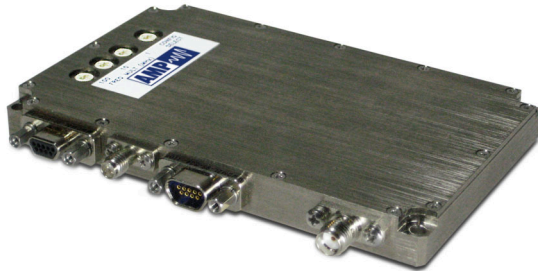


CT40 Series COFDM Video Transmitter

UHF, L-Band, S-Band

100mW / 250mW

Excellent Digital Video Transmitter for Urban Multipath Environments!



AMP's CT40 Series 3.8 cubic inch COFDM video transmitters are designed for high quality COFDM video transmission in multipath environments such as metropolitan areas.

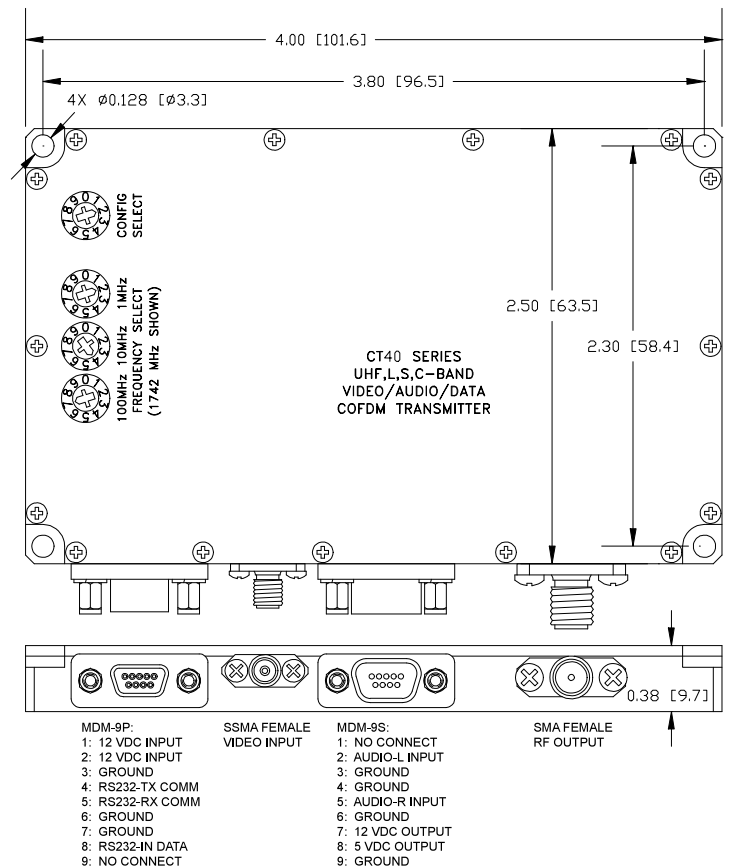
The CT40 Series transmitters offer up to 250mW output power with extremely high power efficiency, full frequency band channelization, narrow 2.5 MHz occupied RF bandwidth, and JPEG2000 video encoding. All models are standard equipped with stereo audio (line/mic), an auxiliary data channel, and built-in 5V and 12V camera supplies. Many COFDM parameters are user-selectable: modulation (QPSK, 16QAM, or 64QAM), FEC (1/6th to 2/3rd), guard interval (1/4 to 1/16), and encryption (AES 128 or 256-bit). CT40 transmitters are optionally configured with selectable 1.25 MHz ultra-narrow RF bandwidth.

Frequency may be selected locally with chassis-mounted BCD switches, remotely through the transmitter's RS232 serial interface, and locally/remotely with configurable pre-sets.

The CT40 Series transmitters are designed to withstand harsh environments and are ideal for law enforcement, surveillance, UAV, UGV, military, and other applications requiring high quality video transmission in a compact, rugged package.

Design Features:

- 3.8 Cubic Inch Package (2.50"x4.00"x0.38")
- High Efficiency (<4.5W DC for 100mW RF)
- Up to 250 mWatts RF Output Power
- Full Frequency Band Channelized
- Three Frequency Selection Modes (BCD Switches, RS232, Programmable Switch)
- 10 Configurable Pre-Sets
- JPEG2000 Video Encoder
- NTSC and PAL Video
- 2.5 MHz Occupied RF Bandwidth
- 1.25 MHz Bandwidth Optional
- QPSK / 16QAM / 64QAM Selectable Modulation
- AES 128 / 256 Bit Selectable Encryption
- Stereo Audio with Auxiliary Data Channel
- 5V and 12V Camera Supplies Built-In
- J-STD-001D Class 3 Assembly (Medical/Aerospace)



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CT40 COFDM Video/Audio/Data Transmitter

RF Characteristics

Frequency Range (Specify): (Other Ranges Available)	UHF: 340.0 – 399.9 MHz Lower L-Band: 1435 – 1535 MHz Upper L-Band: 1700 – 1850 MHz S-Band: 2200 – 2399 MHz ISM S-Band: 2400.00 – 2499.75 MHz	Steps: 100 kHz Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other Steps: 250 kHz
Frequency Selection (Specify):	Fixed or Channelized (Full Band - BCD Rotary Switches, RS232 Remote Control, and Programmable Binary Switch)	
Frequency Stability:	±4 ppm Over -20°C to +70°C	
Output Power (Specify):	100 mW or 250 mW	
Output Impedance:	50 Ω Nominal, VSWR 2:1 Maximum	
Output Protection:	Open/Short Indefinitely	
Occupied Bandwidth (Specify):	2.5 MHz Narrow or Selectable 2.5 MHz Narrow / 1.25 MHz Ultra-Narrow	
Spurious Output:	-13 dBm Maximum	

COFDM Video/Audio Characteristics

Modulation Type:	QPSK, 16QAM or 64QAM - Selectable	
Input Impedance:	75 Ω Nominal, Unbalanced	
Video Encoding:	JPEG2000	
Video Format:	NTSC and PAL - Selectable	
Frame Rate:	30 FPS (NTSC) or 25 FPS (PAL)	
Horizontal Resolution:	704, 528, 480, or 352 Pixel - Selectable	
COFDM Carriers:	Approximately 200	
Guard Interval:	1/4, 1/8 or 1/16 - Selectable	
Latency:	<60 msec, End to End	
Audio Channels:	Two (Stereo), Mic or Line Level - Selectable	
Audio Input Characteristics:	5 kΩ to Gnd, Minimum, Biased w/ 3.3 Vdc (Mic Mode Only)	
Encryption:	AES 128-bit or 256-bit - Selectable	

COFDM Auxiliary Data Channel Characteristics

Interface Type:	RS-232 One-Way
Supported Data Rates:	Up to 115.2 kbps Selectable
Connection:	RS232 IN-DATA

Configuration Interface Characteristics

Interface Type:	RS-232 Two-Way
Interface Parameters:	9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)
Connection:	RS232 RX/TX-Comm Ports

Power Requirements

Input Voltage:	+11 to +16 Vdc, Reverse Polarity Protected
Current Draw:	375 mA for 100 mW RF
(Typical @ 12 Vdc)	525 mA for 250 mW RF
Camera Supply Output:	+5 Vdc and +12 Vdc, 250 mA Current Limit

Mechanical

Material:	CNC Machined T6061-T6 Aluminum	
Finish:	Nickel Plated	
Dimensions:	2.50" W x 4.00" L x 0.38" H (w/o Heat Sink)	
Weight:	3.5 oz. Maximum	
Connectors:	RF Output:	SMA Female
	Video Input: (Others Available)	SSMA Female
	DC Supply, RS-232:	MDM-9P
	Audio Inputs, Cam Supplies:	MDM-9S

Environmental

Temperature (Operating):	-20°C to +70°C
Acceleration:	100 g, 3 Axes
Altitude:	Unlimited
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation
