

# ET35 Encrypted Video/Audio Transmitter

UHF, L-Band, S-Band, C-Band

**Rugged, Reliable, Efficient, Feature Rich in a Small Package. Ideal for Covert Operations, UAVs, and UGVs!**



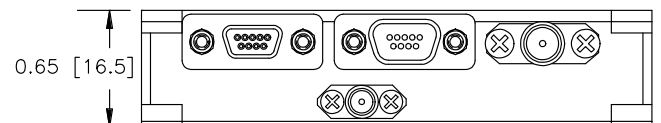
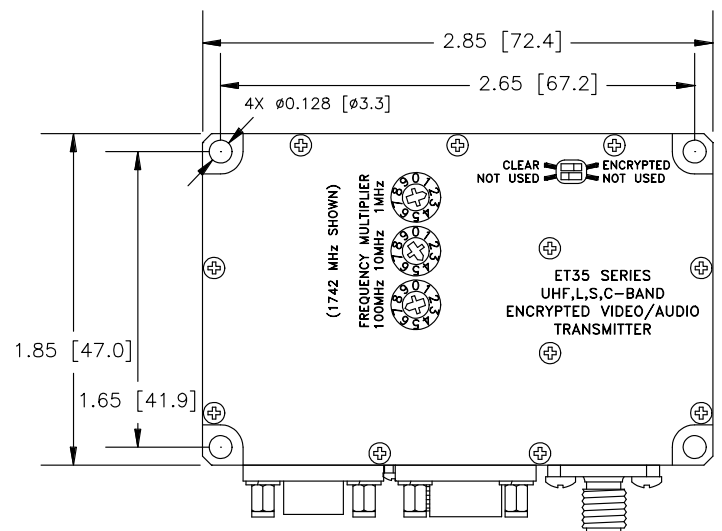
AMP's ET35 Series 3.5 cubic inch encrypted video/audio transmitters offer innovative features and high quality packaging and connectors. Like all E-Series products, ET35 models feature Micro-ViewLockII, or Micro-View/AudioLockII when equipped with audio, for secure video communications. A secondary encryption key may be programmed for maximum security.

ET35 Series transmitters are available with fixed RF output powers of 250 mWatts or 500 mWatts. Transmitter carrier frequency may be selected locally selected with BCD rotary switches, remotely with RS232 interface, or locally/remotely with a programmable binary switch. A slide switch allows selection between encrypted and clear video transmission. ET35 Series transmitters are optionally configured with internally regulated 5V and/or 12V camera supplies.

With military telemetry heritage, ET35 Series transmitters are designed to withstand harsh environments and are ideal for law enforcement, surveillance, UAV, UGV, Military, and other applications requiring efficient, high quality, secure video/audio transmission in a compact, rugged package.

## Design Features:

- 3.5 Cubic Inch Package (1.85" x 2.85" x 0.65")
- Weighs < 3.5 oz.
- 250 mW or 500 mW RF Output Power
- Integrated Micro-View/AudioLock II Encryption
- Secondary Encryption Key Programming
- Full Band Channelized (BCD Rotary Switches, RS232 Remote Control, or Programmable Binary Switch)
- NTSC or PAL Video (Bandwidth & Pre-Emphasis)
- Internal 5V / 12V Camera Supplies (Optional)
- Mic or Line Audio Input Levels
- J-STD-001D Class 3 Assembly (Medical/Aerospace)



MDM-9P:	SSMA FEMALE VIDEO INPUT	MDM-9S:	SMA FEMALE RF OUTPUT
1: VDC INPUT		1: NC	
2: VDC INPUT		2: NC/AUDIO-L IN	
3: GROUND		3: GROUND	
4: NC/RS232 TX		4: GROUND	
5: NC/RS232 RX		5: NC/AUDIO-R IN	
6: GROUND		6: GROUND	
7: GROUND		7: NC/12V CAM SUPPLY	
8: NC		8: NC/5V CAM SUPPLY	
9: NC		9: GROUND	

### \*\* NOTES:

- 1) NC = No Connection
- 2) Models with no audio or cam supply have MDM-9S connector omitted
- 3) Programmable binary switch models utilize a single 16-position binary switch in place of the shown 1 MHz switch



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# AMP ET35 Series Encrypted Video/Audio 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 C-Band: 4400 – 4999 MHz Public Safety C-Band: 4940 – 4990 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 Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other
Frequency Selection (Specify):	Fixed or Channelized (Full Band - BCD Rotary Switches, RS232 Remote Control, or Programmable Binary Switch)	
Frequency Stability:	±4 ppm Over -20°C to +60°C	
Output Power (Specify):	250 mW or 500 mW	
Output Impedance:	50 Ω Nominal, VSWR 1.5:1 Maximum	
Output Protection:	UHF: None – 20:1 VSWR Indefinitely L/S/C: Internal Isolator - Open/Short Indefinitely	
Spurious Output:	-13 dBm Maximum	

## Video Characteristics

Encryption:	Micro-ViewLock II, Line Cut and Rotate, 256 Points
Secondary Key (Optional):	256 bits, RS232 Programmable
Modulation Type:	Analog FM, Positive Sense
Frequency Response (Specify):	4.2 MHz (NTSC) or 5.0 MHz (PAL), ±1.5 dB
Pre-Emphasis:	525-Line (NTSC) or 625-Line (PAL)
Modulation Sensitivity:	±4 MHz / 1 Vpk-pk @ Crossover Frequency
Input Impedance:	75 Ω Nominal, Unbalanced, Shunted by 30 pF Maximum
Distortion:	2% Maximum
Incidental FM:	10 kHz RMS Maximum

## Audio Characteristics

Encryption:	Micro-View/AudioLock II, Digital Audio Over Video, ADPCM X4 Compression
Channels (Specify):	0, 1 (mono), or 2 (stereo)
Frequency Response:	30 Hz to 7 kHz (stereo), 14 kHz (mono), +1/-3 dB
Input Impedance:	4.7 kΩ Minimum, Unbalanced
Input Level (Specify):	Microphone (-55 dBV typical w/ ALC), or Line (-10 dBV)
Mic DC Supply (Audio Input(s)):	2.0 Vdc Thru 4.7 kΩ Pull-Up

## Power Requirements

Input Voltage:	+11 to +16 Vdc, Reverse Polarity Protected
Current Draw: (Max @ 12V)	UHF/L/S-Band: 250 mA for 250 mW RF, 400mA for 500 mW RF C-Band: 275 mA for 250 mW RF, 425 mA for 500 mW RF
Camera Supply Output (Specify):	None, +5 Vdc, +12 Vdc, or Both, 250mA Current Limit

## Mechanical

Material:	CNC Machined T6061-T6 Aluminum	
Finish (Specify):	Nickel Plated or Black Plated	
Dimensions:	1.85" W x 2.85" L x 0.65" H	
Weight:	3.5 oz. Maximum	
Connectors:	RF Output:	SMA Female
	Video Input:	SSMA Female (Others Available)
	Audio Input, Mic/Cam Supplies:	MDM-9S (If Applicable)
	DC Supply, RS232 (If Applicable):	MDM-9P

## Environmental

Temperature (Operating):	-20°C to +60°C
Acceleration:	100 g, 3 Axes
Altitude:	Unlimited
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation