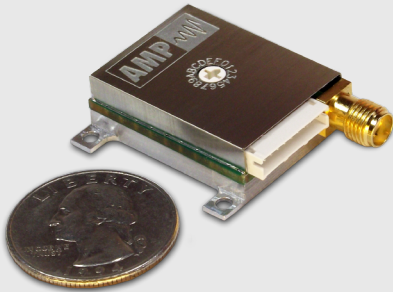


# PMT1 Micro Video/Audio/Data Transmitter

**A Micro Sized Video Transmitter for Size and Weight Sensitive Applications!**



## Design Features

- 0.5 Cubic Inch Package (1.16"x1.24"x0.37")
- Weighs < 1 oz.
- Up to 250mW RF Output Power
- Full Frequency Band Channelization
- 2 Frequency Selection Modes
- Supports Composite Video (NTSC or PAL)
- Optional Audio or Data Subcarrier
- Temperature Indication (Remote Control)
- J-STD-001D Class 3 Assembly (Medical/Aerospace)

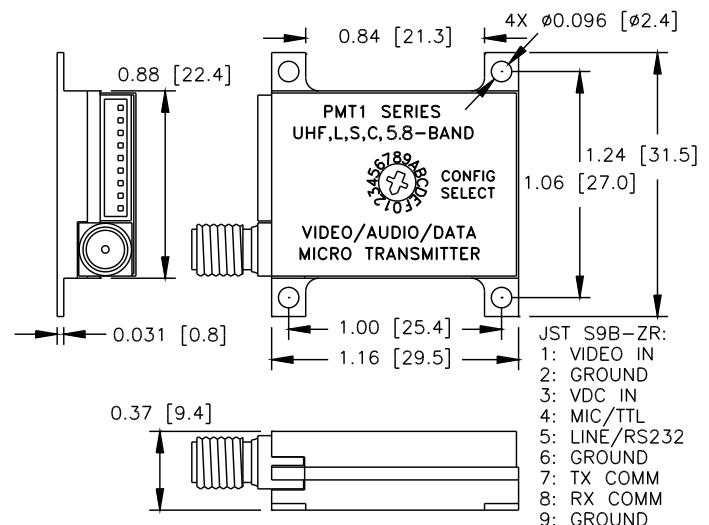
## PMT1 Series

AMP's PMT1 Series 0.5 cubic inch video transmitters offer many innovative features, are designed to withstand harsh environments, and are ideal for UAV and other applications requiring high efficient, high quality video/data transmission in a compact, rugged package.

PMT1 transmitters may be configured with fixed RF output powers of 20 mW or 250 mW and an audio or data subcarrier.

Transmitter carrier frequency may be selected remotely and locally/remotely with a programmable binary switch. Other remotely controllable features include subcarrier on/off and temperature query.

PMT1 transmitters can be mated to AMP's HSP1 or HHA1 High Power Amplifiers for applications that require higher RF output power.



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## RF Characteristics

Frequency Range (Specify):	UHF:	340.0-399.9 MHz	100 kHz Channels
(Other Ranges Available)	Lower L-Band:	1435-1535 MHz	1 MHz Channels
	Upper L-Band:	1700-1850 MHz	1 MHz Channels
	Lower S-Band:	2200-2399 MHz	1 MHz Channels
	Upper S-Band:	2400-2499 MHz	1 MHz Channels
	Full S-Band:	2200-2499 MHz	1 MHz Channels
	Lower C-Band:	4400-4900 MHz	1 MHz Channels
	Upper C-Band:	4900-4999 MHz	1 MHz Channels
	Full C-Band:	4400-4999 MHz	1 MHz Channels
	ISM 5.8 GHz Band:	5725-5875 MHz	1 MHz Channels
Frequency Selection (Specify):	Full Band Channelized - Remote Control Only or Remote/Programmable Switch		
Frequency Stability:	±5 ppm Over -20°C to +60°C		
Output Power (Specify):	20 mW or 250 mW Nominal		
Output Impedance:	50 Ω Nominal, VSWR 2:1 Maximum		
Spurious Output:	-13 dBm Maximum		

## Video Characteristics

Modulation Type:	Analog FM, Positive Sense		
Video Standard (Specify):	NTSC (10Hz to 4.2MHz, 525 Line P/E) or PAL (10Hz to 5.0MHz, 625 Line P/E), +/- 1.5dB		
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/Data Subcarrier Characteristics

Subcarriers (Specify):	None or One, Audio or Data		
Subcarrier Frequency (Specify):	5.8, 6.0, 6.2, 6.5, 6.8, 7.2, 7.5, 8.3, or 8.59 MHz, or Custom		
Frequency Stability:	±0.5% Over -20°C to +60°C		
Subcarrier Insertion Level:	-26 dBc Nominal (Audio) or -22 dBc Nominal (Data)		
Subcarrier On/Off Control:	Remote and Programmable Switch Control		
Modulation Type:	Analog FM, Positive Sense		
Frequency Response:	100 Hz to 10 kHz ±1.5 dB (Audio) or DC to 50 kbps (Data)		
Pre-Emphasis:	75 μsec NTSC or 50 μsec PAL (Audio) or None (Data)		
Modulation Sensitivity:	150 kHz pk-pk @ 1 kHz rate (Audio) or 150 kHz pk-pk (Data)		
Input Level:	-55 dBV Mic or -10 dBV Line (Selectable, Audio) or RS232/TTL (Selectable, Data)		
Input Impedance:	>4 kΩ Unbalanced (Audio) or 10 kΩ to Gnd (Data)		
Mic DC Supply:	2.0 Vdc Thru 4.7 kΩ Pull-Up		

## Configuration Interface Characteristics

Interface Type:	Two-Way UART		
Signalling Type (Specify):	RS232 or 3.3V TTL		
Interface Parameters:	9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)		

## Power Requirements

Input Voltage:	+9 to +14 Vdc, Reverse Polarity Protected		
Current Draw:	100mA at 20mW, 200mA at 250mW Typical at 12 Vdc		

## Mechanical

Dimensions:	1.16" x 1.24" x 0.37"		
Weight:	< 1oz.		
Interconnects*:	RF Output:	SMA Female	
	DC Supply, Video Input, Comms, Audio/Data In: JST S9B-ZR Male, Mate Supplied		

## Environmental

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