



The BMT85 is a single frequency or frequency agile video transmitter with optional audio or data subcarriers.

This transmitter provides a stable RF source intended for use in frequency bands between 1.71 GHz & 5.85 GHz. It operates from 11-32 VDC input voltages and transmits 10 Watts of RF power.

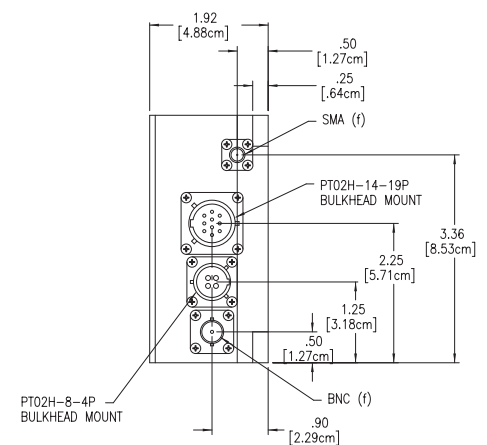
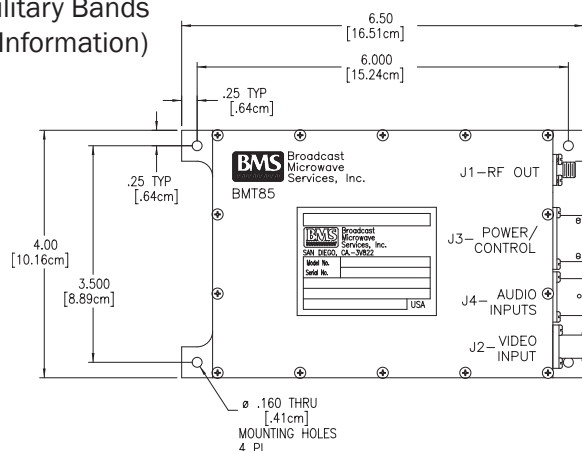
Applications:

- ▶ UAV Video Downlinks
- ▶ Helicopter (or other aircraft) Video Downlinks
- ▶ Surveillance

Key Features

- ▶ Single Frequency or Frequency Agile
- ▶ 10 W Output
- ▶ Stable RF Source
- ▶ 1.71 GHz to 5.85 GHz
- ▶ 2 Optional Audio or Data Subcarriers
- ▶ NTSC/PAI Video/RS170
- ▶ DC Input +11V to +32V
- ▶ Rugged and Compact
- ▶ Available in Most Military Bands (Contact Factory for Information)

The unit is housed in a protective aluminum housing and must be operated with external heat sinking in order to keep the baseplate temperature within the specified limits of -30 °C to +70 °C operation.



PRO/BMT/BMT85

RF Characteristics - For Frequency Range See Ordering Information	
Number of Channels	Consult Factory
Freq. Stability - Standard	± 0.002%
Freq. Stability - Optional	± 0.001%
RF Output Power	See Ordering Information
RF Output Impedance	50Ω, SMA Connector
RF Output Protection	Open/Short/Indefinitely
Spurious Output	-53 dBc Max

Modulation Characteristics	
Modulation Types	FM
Modulation Response - Standard	NTSC, 525 Lines
Modulation Response - Optional	PAL, SECAM, or FLAT
Pre-emphasis - Standard	CCIR 405, 525 Lines
Pre-emphasis - Optional	625 Lines or None
Modulation Sensitivity	± 4 MHz/1 VPP @ Cross-over Frequency
Modulation Input Impedance	75Ω Unbalanced
Baseband Input	1 Vpp

Available Accessories
• TCB-100 Control Box for Remote Channel Select
• HS-75 Heatsink for all Series 85 Models
• HSF-75 Heatsink/Fan for all Series 85 Models

Subcarrier Characteristics	
Subcarrier Frequencies	4.83 to 8.59 MHz, Factory Set
Subcarrier Injection Level	-25 dBc to -30 dBc
Signal to Noise	65 dB
Harmonic Distortion	1% Max
Modulation Type	FM
Modulation Response - Standard	50 Hz to 15 kHz
Modulation Response - Standard, Pre-emphasis	75 μsec
Modulation Response - Standard, Sub. Deviation	75 kHzp
Modulation Response - Optional	50 Hz to 50/100 kHz
Modulation Response - Optional, Pre-emphasis	50 μsec, None
Modulation Response - Optional - Sub. Deviation	100 kHzp, 125 kHzp

Ordering Info	Frequency	Output Power
BMT85-2A	1.71-1.85 GHz	10W
BMT85-3A	2.2-2.4 GHz	10W
BMT85-4A	4.4-5.0 GHz	10W (20W Optional)
BMT85-6A	5.25-5.85 GHz	10W (20W Optional)