

Airborne Telemetry

- UHF Operation
- Up to Four Channels
- Occupies Less than 1-Cubic Inch
- Weighs Less than 1 Ounce
- 1-Watt Output Power
- High-Quality Data Transmission
- Low Current Draw

*A Southern California Microwave
Product*

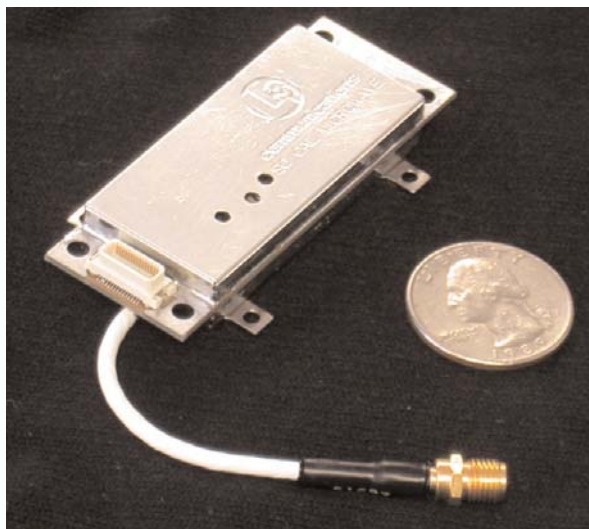


communications

Telemetry-West

Excellence You Can Measure

TNTX Uplink Series **Command Microwave Transmitter** **for Unmanned Vehicles**



The TNTX Series are the most compact and power-efficient Command Transmitters available for Ground Stations today. It is packaged in a rugged, easy-to-mount, 1 cubic-inch, 1 ounce housing, making it ideal for all types of configurations and packaging. The highly-efficient power amplifier design draws minimal current for longer battery life. A built-in Thermal Shut Down switch prevents transmitter damage due to overheating.

Frequency agile (multi-channel) models allow up to four channels in the 390 to 400 MHz range to be factory programmed and selected by parallel or serial remote control. Other functions, including programmable power output levels, can be selected through a RS232 or RS422 computer control port.

Input data is DC-Coupled through an RS232 connection. Frequency response is to 10 kHz allowing a Command data rate of up to 19.2 Kbps to be transmitted.

TNTX Uplink Series Specifications

ELECTRICAL

RF Characteristics

Frequencies	4-Channels in 390 to 400 MHz
Frequency Selection	Remote BCD code
Frequency Stability	±0.003%
Output Power	1 Watt minimum
Optional	Low = +5 dBm nominal Standby = -25 dBm nominal
Output Impedance	50 Ω

Power Requirements

Input Voltage	+11.5 to +16 Vdc (lower voltages available)
Current Draw	High Power = 450 mA typical, 550 mA maximum
Optional	Low Power = 80 mA typical Standby = 50 mA typical
Isolation	B-common to chassis
Reverse Polarity Protection	Yes, up to 16V

Data Characteristics

Modulation Sense	Negative voltage increases frequency
Data Rate	Up to 19.2 Kbps
Frequency Response	DC to 10 kHz
Modulation Sensitivity	Adjustable, set to ±75 kHz
Input Level	RS232
Input Impedance	10K Ω

ENVIRONMENTAL

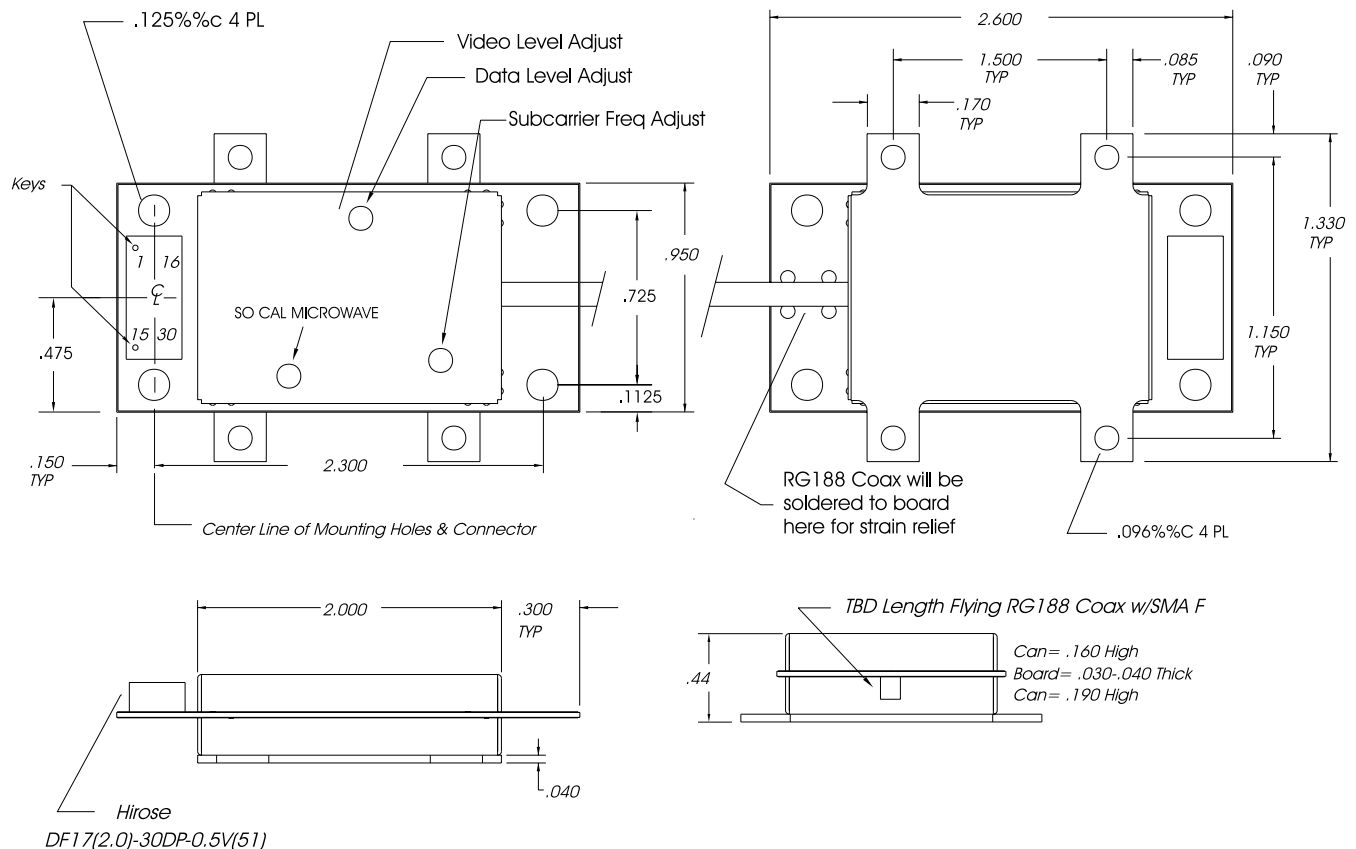
Temperature (Operating)	0 to +50°C baseplate
Overtemp Protection	Unit will go to low power at 75°C, resume normal output at 70°C
Altitude	Unlimited
Vibration	2G random, 20 Hz to 2000 Hz, 0.4" DA max.

MECHANICAL

Size	0.95" x 2.6" x 0.44" (24 x 66 x 11.18 mm)
Weight	1 oz. (28.36 g) maximum

Connectors

RF	SMA female on 3" RG 188 coax cable
Remote Connector	Input Power, Data Input Option: RF Output Power
Connector	Hirose Board-to-Board DF17 (2.0) -30 DP -0.5V (51) (Interface Board Available)



TNTX 1 Watt Series Mechanical Outline Drawing

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