

# TX-2400 S-Band Transmitter

The TX-2400 is a proven satellite and launch vehicle S-Band transmitter with built in FM/FSK modem for downlink of payload data and telemetry. The TX-2400 has been a workhorse for SpaceQuest's own satellites and a mainstay of our customers for over a decade.

#### **Key Features**

- > 16 Pre-configured Channels
- → FM or FSK Modulation
- → Variable Data Rates from 56 Kbps to 6 Mbps
- > Low Mass, Power Efficient Design
- → CubeSat Compatible



### **General Specifications**

Frequency:	2000 MHz to 2400 MHz
Transmit Power:	1.0 - 2.5 Watts (5 and 10 Watts Available with TX-2400M-HP)
Data Rate:	56 Kbps to 6 Mbps
Modulation:	FM, FSK
Channels:	Up to 16 Channels, Selectable On Orbit in 25 KHz Steps





TX-2400

## **Electrical and RF Specifications**

Input Voltage:	8 to 32 Volts DC
Current:	800 mA Maximum (2.4 Watts Version)
Power Connector:	MDM 9S Mounted to Enclosure
Power Return:	Power and Modulation Return Common to Chassis
Frequency Stability:	± .002% (-20°C to +50°C)
Distortion:	1% Max
RF Output Impedance:	50 Ohms Nominal
RF Output Connector:	SMA Female
Reverse Polarity:	Protected
VSWR:	12.0:1

## **Mechanical and Environmental Specifications**

Mass:	70 grams
Size:	68 mm x 35 mm x 15 mm
Operating Temperature:	-20°C to +70°C
Storage Temperature:	-30°C to +80°C

### Heritage

- → AprizeSats 3, 4, 5, 8, and 10
- → exactView 5, 6, and 11 (exactEarth)
- → Genesis 1 and 2 (Bigelow Aerospace)
- → FalconSat-6 (USAFA)
- → Unisat-4 (Univ. of Rome)
- → Prox-1 (Georgia Tech)

TX-2400-ver-20160707

