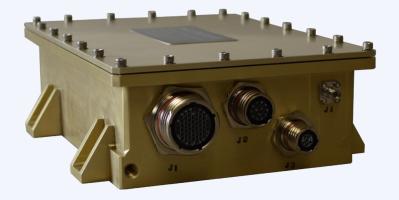


µXTx-200™ WIDE BAND TRANSMITTER



µXTx-200™ Wide Band Transmitter is a highly reliable X-Band transmitter developed to meet the demanding radiation requirements of long-term space missions. Its high data rates — up to 3.5 Gbps — support advanced digital modulation schemes and the unit is available with multiple modulation and encoding options. The µXTx has flown on the NASA IRIS mission for over a decade.

APPLICATIONS

- Mission Data Transmitter
- Long-term Space Missions
- Programs requiring high data rates

KEY FEATURES

- Radiation Hardened Design
- Ruggedized for Launch and Deployment
- Convolutional Encoding, Standard
- Fully Re-Configurable On-Orbit
 - RF Frequency
 - RF Output Power
 - Data Rate/Modulation
 - Forward Error Correction On/Off

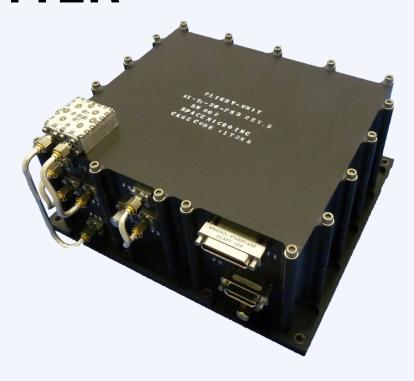
SPECIFICATIONS: TRANSMITTER

FREQUENCY	8.025 GHz to 8.5 GHz (Frequency Agile)
RF OUTPUT POWER	1.4 W
MODULATION FORMATS	BPSK, QPSK OQPSK
CHANNEL BANDWIDTH	100 Hz - 10 MHz
DATA RATE	Up to 3.5 Gbps
FEC	Reed-Solomon LDPC 7/8 Serial Concatenated
FREQUENCY ACCURACY	±50 ppm
PHASE NOISE NON-COHERENT MODE	3° RMS Maximum
SPURIOUS AND HARMONICS	-60 to -50 dBc

2/23/24 Voyager Space External Use| 1



µXTx-200™ WIDE BAND TRANSMITTER



SPECIFICATIONS: OTHER

INTERFACES	RS-422 RS-485 LVDS
CONNECTORS	SMA
ENCRYPTION	AES-256 FIPS 140-2 Supports Industry Standard External Encryption Units
ENVIRONMENT Temperature Range Vibration Parts Level Options Suitability	-24°C to +65°C Operational GSFC-STD-7000 (NASA GEVS) Acceptance Levels Commercial Space, NASA Levels 1, 2, 3 LEO, MEO, GEO
SWAP Dimensions Mass Power Consumption Input Voltage	20.8 cm x 15.2 cm x 6.6 cm 2.3 kg 45 W (1.4 W Output Power) 60 W (5 W Output Power) 80 W (8 W Output Power) + 28 ±6 V DC