

# SemaLink

## SemaLink Ku-TX100 - Ku Band Agile Telemetry / Beacon Transmitter

Telemetry, Command & Ranging Subsystem Products



### FEATURES

- In orbit frequency agility up to 250 MHz
- High output power
- Telemetry (modulated) or beacon (unmodulated) modes
- Standard PM modulation and BPSK/PM modulation schemes available
- Low spurious signals and phase noise
- Cost effective and state-of-the-art design using latest qualified components
- Compact design for low mass and size
- Vertical mounting for dense system layout
- Low non-recurring engineering costs with the help of frequency agility
- CAN-SU data protocol
- Compatible with major platforms' electrical and mechanical interfaces
- Electromagnetic compatibility per MIL-STD-461F
- Designed for GEO platforms
- Fully space qualified

*SemaLink Ku-TX100  
Ku Band Agile Telemetry Transmitter*

## OVERVIEW

SemaLink Ku-TX100 - Ku Band Agile Telemetry /Beacon Transmitter, which has been developed and qualified to operate on geostationary satellites, is responsible for transmitting the telemetry data.

SemaLink Ku-TX100 - Ku Band Agile Telemetry /Beacon Transmitter is a state-of-the-art RF equipment with the flexibility to change the frequency in orbit and operates on Ku-Band frequencies. It has the capability to work as a modulated telemetry transmitter or an unmodulated beacon signal transmitter.



SPECIFICATION	Ku-TX100 – KU BAND AGILE TELEMETRY	NOTES
Operating Frequency Range	11.1 - 11.8 GHz	
Frequency Stability	±5 ppm @ EOL	
Frequency Agility Range	250 MHz	with 100 kHz steps
Output Power	30 dBm secondary: >5dBm	Simultaneous RF outputs different output power options upon request
Spurious & Harmonic Outputs	50 dBc	
Modulation	PM	
Data Rate	Up to 8,192 kbps	
Ranging Delay Variation	80 ns p-p	
Data Interface	CAN-SU, RS-422	Options available upon request
Power Consumption	< 17 W	
Mass	< 1.9 Kg	
Dimensions	235x190x58mm	
Flight Heritage	TÜRKSAT 6A	



### SPACE QUALIFIED

Fully space qualified equipment for geostationary satellites.



### IN FLIGHT CONFIGURABLE

Frequency flexibility function allows in orbit change of operating frequency.



### HIGH RELIABILITY

Designed for more than 15 years of lifetime in geostationary orbit with lowest cost possible.



### SWaP-C DESIGN

Designed for low size, weight, power consumption and cost, required to meet state-of-the-art customer requirements.