



The XTLK is a ruggedized RF front end that provides full duplex operation in L, S, C, and Ku frequency bands with up to 10W of linear transmit power.

Its optimized design combines multiple datalink front-end subsystems into a single box thereby reducing overall system SWaP-C. The XTLK compact single LRU package eliminates the need for in-theater system reconfiguration. Single and dual-band transceiver options are also available.

KEY FEATURES:

- Simultaneous TX & RX
- Operates in L, S, low & high C, low and high Ku-Bands (see chart)
- Ruggedized and Compact One Box Solution
- RS-485 Monitoring and Control
- Vortex® and Rover® Compatible
- High Linearity Compatible with Virtually All Modulation Forms

XTLK Multi Band RF Front End

The XTLK is a full duplex, multiband RFE offering full duplex communication on L-, S-, C-, and Ku-bands for full motion video (FMV) dissemination and reception. The XTLK integrates the power amplifiers, low noise amplifiers, diplexers, and switches necessary to transmit and receive simultaneously on any pair of supported bands.

		Receive					
		L-Band	S-Band	Low C-Band	High C-Band	Low Ku-Band	High Ku-Band
Transmit	L-Band		✓	✓	✓	✓	✓
	S-Band	✓		✓	✓	✓	✓
	Low C-Band	✓	✓			✓	✓
	High C-Band	✓	✓			✓	✓
	Low Ku-Band	✓	✓	✓	✓		✓
	High Ku-Band	✓	✓	✓	✓	✓	

XTLK MULTI BAND RF FRONT END PERFORMANCE SPECIFICATIONS

Specification	Frequency Band		
	L/S	C	Ku
Frequency Range	1625-1850 MHz & 2200-2500 MHz	4400-4940 MHz & 5250-5850 MHz	14.4-14.83 GHz & 15.15-15.35 GHz
TX Output Power (P _{1dB})	10 W minimum	8 W minimum	5 W minimum
TX Input Power	-10 to +12 dBm		
RX Noise Figure	3.4 dB maximum	4.75 dB maximum	4.5 dB maximum
RX Gain	35 dB minimum	30 dB minimum	30 dB minimum
VSWR (Input and Output)	2.0:1 maximum		
Spurious and Harmonic EMI	IAW MIL-STD-461F		
RF Output Protection	Will operate into any load at any phase angle		
DC Input Power	+24 to +32 VDC @ 225 W Max (Reverse polarity protected)		
Size and Weight	12.0 x 7.75 x 2.5" w/o heatsink and fan, 12 pounds maximum		
RF Connectors	SMA		
Operating Temperature	-40 to +60°C ambient		
Power and Control	D38999/24WB5PA (DC Power), D38999/24WC35SN (RS-485 and Discrete)		
Environmental	IAW MIL-STD-810F		



XTLK-1
Multi-Band Transceiver with Cooling Kit



XSK-1
Single-Band Ku Transceiver with Cooling Kit