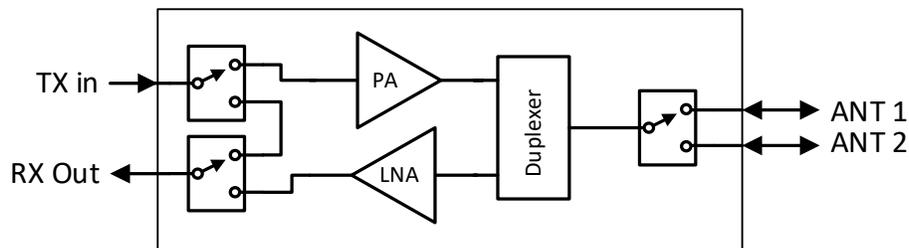


# XSK-8

Single Band Transceiver, Ku-Band

Rev A



## Product Overview

The XSK-8 is a full duplex RFE that packages a power amplifier, low noise amplifier, and all switches and filtering required to enable simultaneous transmission and reception in Ku-band. The XSK-8 includes a RS-485 URP digital control interface that allows for dynamic configuration while in operation, allowing band selection and output power control. This provides for increased versatility by supporting maximum transmit power for FSK and FM modulated carriers as well as linear operation for CDL and BE-CDL waveforms without detrimental spectral regrowth. The XSK-8 has been ruggedized for deployment on both fixed wing and rotary wing environments and has been qualified to both DO-160 and MIL-STD-810 specifications. The XSK-8 is part of the XTLK family of products.

# XSK-8



## Technical Specifications

### General

<b>Operating Frequency</b>	14.4 – 14.83 GHz
<i>Full duplex floppable</i>	15.15 – 15.35 GHz
<b>RF Loopback</b>	Pre-HPA
<b>VSWR (Input and Output)</b>	2.0:1 max
<b>DC Power</b>	+20 V-32 V, 28 V nom
<b>Power Draw</b>	200 W max
<i>Power supply is reverse polarity protected</i>	

### Power Amplifier

<b>TX P<sub>SAT</sub></b>	15 W typ
<b>TX P<sub>LINEAR</sub></b>	10 W min
<b>Tx Input Level</b>	+20 dBm (no damage) +0 dBm to +12 dBm
<b>Output Protection</b>	Survives operation into infinite VSWR
<b>Spurious and Harmonics</b>	IAW MIL-STD-461F

### Low Noise Amplifier

<b>RX Noise Figure</b>	4 dB typ, 5 dB max
<b>RX Gain</b>	30 dB min
<b>RX OP<sub>1dB</sub></b>	0 dBm min
<b>ANT Input Level</b>	+20 dBm (no damage)

### Physical

<b>Dimensions</b>	7.75" x 7.61" x 5.56"*
<b>Weight</b>	9.9 lbs. max

*\*Dimensions include fan and heatsink, they do not include connectors.  
Outline drawing available on request.*

### Connectors

<b>RF Input/Output</b>	SMA Female
<b>ANT1/ANT2</b>	SMA Female
<b>DC Power*</b>	D38999/24WB5PA
<b>Command/Status*</b>	D38999/24WC35SN
<b>Fan Power*</b>	PT02E-8-4S
<i>*Or compatible</i>	

### Environmental

<b>Operational Alt</b>	40 kft
<b>Operating Temp</b>	-55°C to +60°C*
<b>Shock and Vibration</b>	IAW MIL-STD-810G/DO160G
<b>Rain/Sand/Salt Fog</b>	IAW MIL-STD-810G/DO160G

*\*Operation to +85°C for short duration and/or reduced power. See  
Hardware ICD for details.*

### Installation Instructions

The XSK-8 includes a military grade fan and heatsink capable of cooling the amplifier over its rated operating temperature. A minimum of 2" of clearance on either side of the fan egress and 2" clearance above the fan ingress is required for proper airflow.

### Additional Configurations

Other frequency ranges and power levels are available. Visit our website or contact our sales team for additional options: [sales@ramonaresearch.com](mailto:sales@ramonaresearch.com)