### SPECIFICATIONS

**Frequency Range**
- Tx: 20.2 - 21.2 GHz / Rx: 30 - 31 GHz  
- Tx / Rx: 24 - 27 GHz

**RF Modulation**
- BPSK / QPSK / OQPSK / 8PSK / 16APSK

**Forward Error Correction**
- LDPC/BCH/REED SOLOMON/CONVOLUTIONAL

**Bandwidth**
- Tx: 250 MHz / Rx: 200 MHz

**Peak Throughput**
- > 1 Gbps

**Interface Options**
- 2x GigE-Ethernet, 2x RS-422, 2x LVDS, HDMI, 1PPS/clock

**TX Power**
- Up to +35 dBm, finely adjustable

**Antenna Ports**
- 1 TX port Waveguide  
- 1 RX port Waveguide

**Receiver Sensitivity**
- Minimum -117 dBm

**Max RF Input**
- - 20 dBm

**Max RF Input Without Damage**
- 0 dBm

**Frequency Accuracy**
- +/- 1.5 ppm Max

**Input Voltage**
- 22 - 36 VDC

**DC Power Consumption**
- Tx: 50 W MAX / Rx: 20 W MAX  
- Total: 60 W MAX

**Operating Temperature**
- -30 °C to +60 °C

**Mass**
- < 1 kg

**Dimensions**
- 160.5 mm x 96 mm x 60 mm

**Environmental**
- Pre-qualified to NASA GEVS shock/vibe

**Encryption**
- AES-256 up & down  
- Compatible with CryptoSWIFT-T1, KI-55, KI-103

**Radiation Environment**
- 10Krad TID

**Lifetime**
- 3+ years, depending upon orbit

**Applications**
- SATCOM, SmallSats, UAVs, High Altitude Aircraft

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**DESCRIPTION**

The SWIFT-X KTRX is a Ka-band software defined transceiver that has one of the smallest size, weight and power form factors for its capabilities. With a wide array of electrical interfaces and AES encryption, the SWIFT-X KTRX is ideally suited to many different applications.