**SPECIFICATIONS**

| FREQUENCY RANGE | S-band: 1700 - 2500 MHz  
|                 | X-band: 7000 - 8500 MHz |
| RF MODULATION   | BPSK / QPSK / OQPSK / 8PSK / 16APSK |
| FORWARD ERROR CORRECTION | LDPC/BCH/REED SOLOMON/CONVOLUTIONAL |
| BANDWIDTH      | S-band: 10 MHz  
|                 | X-band: 50 MHz |
| PEAK THROUGHPUT | S-band: Up to 6 Mbps  
|                 | X-band: Up to 25 Mbps |
| INTERFACE OPTIONS | 1x Ethernet, 2x RS-422, 2x LVDS, Spacewire, 1PPS/clock |
| TX POWER       | S-band: Up to +33 dBm, finely adjustable  
|                 | X-band: Up to +33 dBm, finely adjustable |
| ANTENNA PORTS  | S-band: 1 TX port SMA / 1 RX port SMA  
|                 | X-band: 1 TX port SMA |
| RECEIVER SENSITIVITY | -130 dBm @ 1 ksym/s, BPSK |
| MAX RF INPUT   | -20 dBm |
| MAX RF INPUT WITHOUT DAMAGE | 0 dBm |
| FREQUENCY ACCURACY | +/- 1.5 ppm Max |

| INPUT VOLTAGE   | 9 - 34.6 VDC |
| DC POWER CONSUMPTION | Standby: 4W Max  
|                 | S-band: Tx: 12W Max / Rx: 8W Max  
|                 | X-band: Tx: 22W Max |
| OPERATING TEMPERATURE | -30 °C to +60 °C |
| MASS            | < 800g |
| DIMENSIONS      | 90.4 mm x 98 mm x 62 mm |
| ENVIRONMENTAL   | Pre-qualified to NASA GEVS shock/vibe |
| RADIATION ENVIRONMENT | 10Krad TID |
| LIFETIME        | 3+ years, depending upon orbit |
| ENCRYPTION      | AES-256 up & down, FIPS140-2 Level 1 available  
|                 | Compatible with CryptoSWIFT-T1, KI-55, KI-103 |
| WAVEFORM / AIR INTERFACE | CCSDS Standard |
| APPLICATIONS    | SATCOM, SmallSats, UAVs, High Altitude Aircraft |

**DESCRIPTION**

The SWIFT-XTS is a S-band transceiver and X-band transmitter software defined radio 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-XTS is ideally suited to many different applications.