

# TETHERS UNLIMITED, INC.

# SWIFT-SLX<sup>®</sup>



## SOFTWARE DEFINED RADIO S-BAND TRANSMITTER

### SPECIFICATIONS

#### FREQUENCY RANGE

1700 - 2500 MHz

#### INPUT VOLTAGE

9 - 34.6 VDC

#### RF MODULATION

BPSK / QPSK / OQPSK / 8PSK / 16APSK

#### DC POWER CONSUMPTION

Tx: 12W Max / Rx: 8W Max / Standby: 4W Max  
Tx + Rx: 16W Max

#### FORWARD ERROR CORRECTION

LDPC/BCH/REED SOLOMON/  
CONVOLUTIONAL

#### OPERATING TEMPERATURE

-30 C to +60 °C

#### BANDWIDTH

10 MHz

#### MASS

< 300g

#### PEAK THROUGHPUT

Up to 6 Mbps

#### DIMENSIONS

90.4 mm x 98 mm x 36.5 mm

#### INTERFACE OPTIONS

1x Ethernet, 2x RS-422, 2x LVDS, Spacewire,  
1PPS/clock

#### ENVIRONMENTAL

Pre-qualified to NASA GEVS shock/vibe

#### TX POWER

Up to +33 dBm, finely adjustable

#### RADIATION ENVIRONMENT

10Krad TID

#### ANTENNA PORTS

1 TX port SMA  
1 RX port SMA

#### LIFETIME

3+ years, depending upon orbit

#### RECEIVER SENSITIVITY

-130 dBm @ 1 ksym/s, BPSK

#### ENCRYPTION

AES-256 up & down, FIPS140-2 Level 1 available  
Compatible with CryptoSWIFT-T1, KI-55, KI-103

#### MAX RF INPUT

-20 dBm

#### WAVEFORM / AIR INTERFACE

CCSDS Standard

#### MAX RF INPUT WITHOUT DAMAGE

0 dBm

#### APPLICATIONS

SATCOM, SmallSats, UAVs, High Altitude Aircraft

#### FREQUENCY ACCURACY

+/- 1.5 ppm Max



### DESCRIPTION

The SWIFT-SLX is a S-band and L-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-SLX is ideally suited to many different applications.



AS9100  
Certified



Flight  
Heritage



Low  
Power



Light  
Weight



Small  
Footprint



High  
Performance