



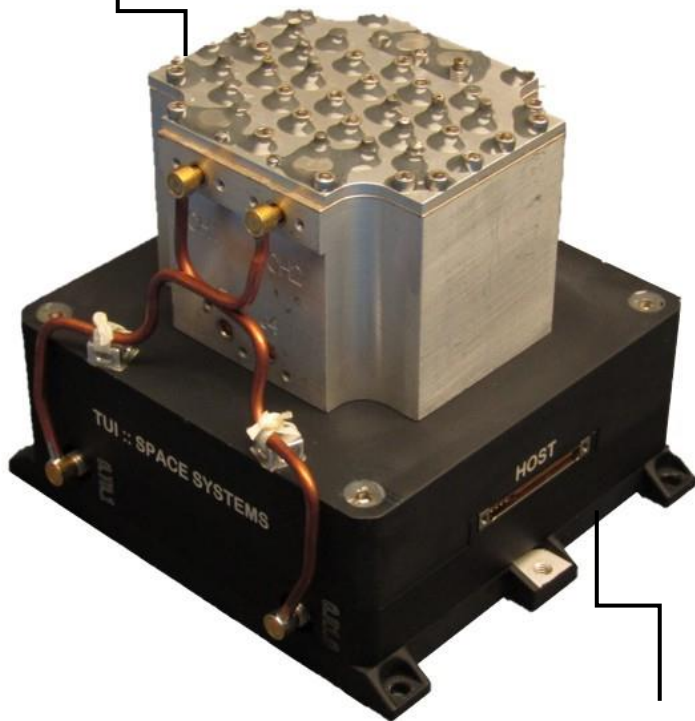
SWIFT™ -SLX

Flexible High-Performance S- and L-Band Communications

Description

The SWIFT-SLX is an S-band and L-Band software defined transceiver that has one of the smallest size, weight and power form factors in the industry for its capabilities. As an integrated system, it combines the data interface, RF transceiver chain and power amplifier in a single package. With a wide array of electrical interfaces and AES encryption, the SWIFT-SLX is suited to many different applications, from the Earth to the Moon and anything in between.

Shown with Optional
Diplexer



Units currently on-orbit
supporting LEO & GEO
missions

Why SLX?



Flight Heritage

Proven communications on several missions



Low SWaP

Weighs < 400 grams and
~16W Operating Power



Modulation Options

Tx and Rx can be modulated
based on your requirements

Modulation can be
configured on-orbit



Encrypted Networking

AES-256 can be added to
base configurations



Specifications

SDR Performance	Specification
Peak Throughput	Tx: up to 25 Mbps Rx: up to 5 Mbps
Frequency Range	1750 – 2300 MHz
Tx Bandwidth	10 MHz
Tx Power	+33 dBm (Finely Adjustable)
Rx Bandwidth	9.9 MHz
Operating Dynamic Range	-120 to -50 dBm

Modulation Options- reconfigurable on-orbit

Rx	Tx
BPSK, AMFSK, SGLS, USB	BPSK, QPSK, OQPSK, 8PSK, 16APSK, SGLS, USB

SWaP	Specification
Size (with connectors and mounting feet)	(L) 98 x (W) 94 x (H) 35 mm
Mass	< 400 grams
Input Voltage	9 – 34.6 VDC
Operating Power	16W max
Standby Power	4W max
Operating Temperature	-30C to +60C
Radiation	40 Krad TID, 200 MeV non-destructive latch-up, rad-hard flash
Vibration	22.6 Grms

Interfaces**

RS-422 for TT&C (Prime and Redundant ports)

LVDS for Data Transfer

1 Tx port SMA

1 Rx port SMA

Encryption (Optional Add-On)

AES-256 up & down

Compatible with KI-55, KI-103, Iron Fortress (KI-18 x 2)

Forward Error Correction

Convolutional Coding, Reed Solomon, LDPC, BCH

Features

CCSDS TM/TC/AOS/Security Packet, Gryphon Framing

NTIA/SFCG Mask Compliant

PN Ranging (one-way, two-way)

Coherent or non-coherent

*Additional Modulation Options Available

**Additional Interfaces Available