

## Description

This Test Loop Translator unit is intended to use as satellite communication test equipment. By the help of this TLT the operator can check the RF performance of uplink and downlink path without actual satellite connections. It includes a mixer, filters, amplifiers, programmable attenuators, power level detectors, local oscillator, microprocessor based control circuitry and DC power supply.

## Product Features

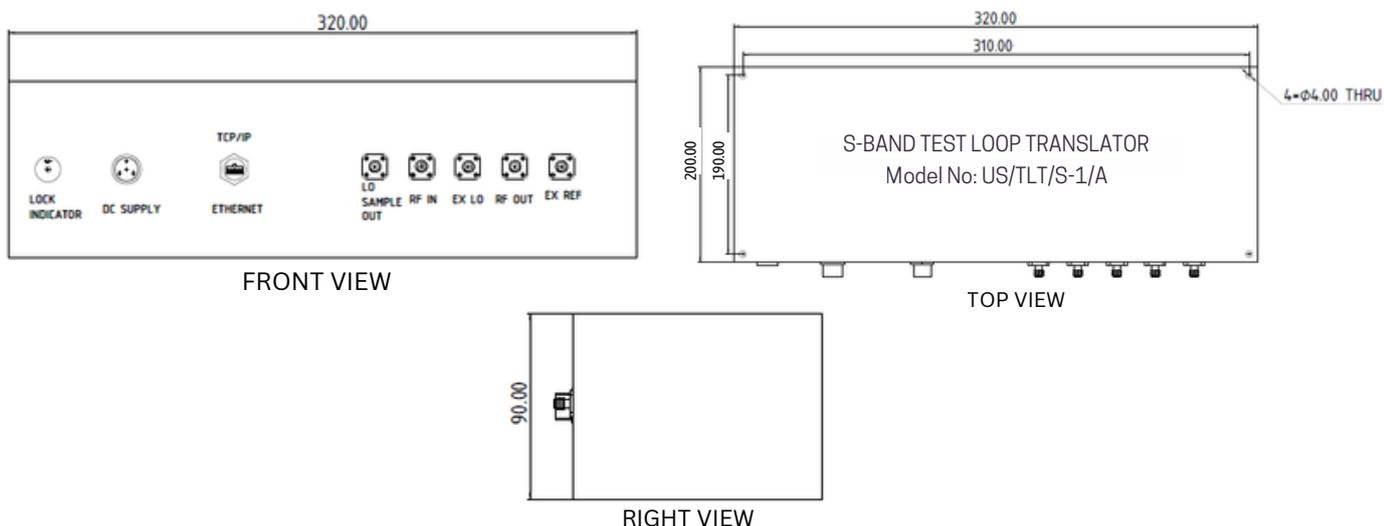
- Excellent Phase Noise Parameter.
- High Input / Output Isolation.
- Compact Size.
- Robust Construction.
- Also available for L, X and C-Band frequencies.
- Customization can be made based on the customer requirements.

## Specifications

Electrical Characteristics	
Input Frequency Range	2025 MHz - 2120 MHz
Number of Channels	1
Input Level Range	-30 to 0 dBm with AGC Control
Input Impedance	50 ohms
Input VSWR	1.4:1 max.
Output Frequency Range	2200 MHz - 2300 MHz
Output Level Range	-80 to -40 dBm, Adjustable in 1 dB step size. The Output Level will remain fixed at set value with variation in RF Input Level (AGC controlled).
Output VSWR	1.4:1 max.
Output Impedance	50 ohms
Transfer Characteristics	
Conversion Type	Single Conversion using tunable LO
Spurious and Harmonics	- 60 dBc min.

Local Oscillator Performance	
Operating Frequency Range	174 - 184 MHz
Step Frequency	1 KHz
Reference source	Internal / External, automatic change over
Internal source	Stability within $\pm 1.0$ ppm
Phase noise	-74 dBc/ Hz @100Hz away -85dBc/ Hz @ 1 KHz away
External reference frequency	5 / 10 MHz, automatic selection
Mechanical Parameters	
RF & IF Connectors	N - Female
Local signal monitor port	SMA-female
External local signal connector	SMA-female
External reference input	N-female
Control & Monitor connector	RJ-45 (outdoor)
Control interface	TCP / IP
Power voltage	+ 24 V DC $\pm$ 10%
Operation temperature range	0°C to +50°C
Dimensions	300 x 250 x 100 mm approx.

## Drawings



## Applications



Aerospace



Military



Teleport Management



Broadcasting



Satellite Communications

