



Advantages

- Converts S-band 2025 –2120 MHz to 2200-2295 MHz
- Cost effective solution
- 10 MHz high stability internal reference
- Front panel control (local)
- Full remote control (remote)

Operating Bands

Basic Model	RF Output	RF Input
number	MHz	MHz
ATLT- S100	2200 - 2295	2025-2120

Overview

The Advantech Test Loop Translators ATLT-S100 models are available in variety of operating bands. The units are designed for testing satellite communications links. They simulate the satellite by band-translating the uplink frequencies to down link frequency. A single band ATLT unit works with 2025-2120 MHz operating frequency band, translating it to 2200-2295 MHz, ready to be processed by the demodulator. Other frequency bands are also available. Please consult factory.

The flexible and comprehensive monitor and control features on the ATLT-S100 ensure that it will fit into any network management system architecture. The user-friendly front panel or the RS485 remote interface will provide full set-up and fault monitoring facilities.

The translator unit is housed in 19" 1U shelf. It is designed to meet the phase noise and frequency stability requirements of the satellite communications industry.

Options

- 10 MHz internal/external reference with Autosensing
- Ethernet SNMP Monitoring and Control
- · Other operating bands, please consult factory

PRODUCT FEATURES & SPECIFICATIONS

RF Output

Frequency range 2200-2295 MHz

 50Ω Output impedance

Output VSWR 1.5:1 max over operating band

Conversion Parameters

Max Conversion Gain -35 dB min Gain adjustment 40 dB Attenuator step size 1 dB

Gain flatness 2.0 dB P-P max.

0.8 dB P-P max. over any 40 MHz

Gain stability ±0.75 dB/15°C max. 0°+55°C

-45 dBc In-band **Spurious**

-50 dBm Out-of-band

0.02 ns/Hz Group delay (over 40 MHz) Linear

Parabolic 0.003 ns/MHz² Ripple 1 ns p-p

Phase noise 10 Hz -45 dBc

100 Hz -73 dBc 1000Hz -83 dBc 10 kHz -93 dBc

100 kHz -103 dBc

1 MHz -115 dBc

Reference

External Reference 10 MHz External ref. input level $0~\text{dBm} \pm 5~\text{dB}$ $+/-2 \times 10^{-8} / day$ Internal reference stability +/-1 x 10⁻⁷ / year Aging

RF Input 2025-2120 MHz Input level 0 dBm max

+10 dBm no damage Input/Output Connector N-type (female)

Return loss 18 dB

Controls & Indicators

Band select Attenuator control Local/Remote Mute/Un-mute Total time is use

Mechanical

Dimensions Width 19" (482.6 mm)

Height 1U 1.75" (44.45 mm)

Depth 20" (508 mm)

Power Supply

Voltage 90 - 265 VAC (47 - 63 Hz)

Power 20W

Connector IEC 603320 10A

Monitor and Control

RS 485 DB9 RS232 DB9

Environmental

Operational 0°C to +50°C standard Storage -55°C to +85°C Humidity Non-condensing

Altitude 3,000m AMSL

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An ISO 9001: 2008 Company



Ref.: PB- ATLT-S100-13150