

## Test Loop Translator ATLT-Ka100 model



### Advantages

- Converts Ka-band 30.0 – 31.0 GHz to 20.2 - 21.2 GHz
- Cost effective solution
- 10 MHz high stability internal reference
- Front panel control (local)
- Full remote control (remote)

### Operating Bands

Basic Model number	RF Input GHz	RF Output GHz
ATLT- Ka100	30.0 - 31.0 GHz	20.2 - 21.2

\*Other frequencies are available, please consult the factory

### Overview

The Advantech Wireless Test Loop Translators ATLT- Ka100 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 30.0 - 31.0 GHz operating frequency band, translating it to 20.2 - 21.2 GHz. Other frequency bands are also available. Please consult factory.

The flexible and comprehensive monitor and control features on the ATLT-Ka100 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

- Ethernet SNMP Monitoring and Control
- Other operating bands, please consult factory

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Product Features & Specifications			
RF Output		RF Input	
Frequency range	20.2 - 21.2 GHz		30.0 - 31.0 GHz
Output impedance	50Ω	Input level	0 dBm max
Output VSWR	1.5:1 max over operating band		+10 dBm no damage
		Input / Output Connector	N-type (female)
		Return loss	18 dB
Conversion Parameters		Controls & Indicators	
Max Conversion Gain	-35 dB min		
Gain adjustment	40 dB		Attenuator control
Attenuator step size	1 dB		Local/Remote
Gain flatness	2.0 dB P-P max.		Mute/Un-mute
	0.8 dB P-P max. over any 40 MHz		Total time is use
Gain stability	±0.75 dB/15°C max. 0°+55°C	Mechanical	
Spurious	-45 dBc In-band	Dimensions	Width 19" (482.6 mm)
	-55 dBm Out-of-band		Height 1U 1.75" (44.45 mm)
			Depth 20" (508 mm)
Group delay (over 40 MHz)	Linear 0.02 ns/Hz	Power Supply	
	Parabolic 0.003 ns/MHz <sup>2</sup>	Voltage	90 – 265 VAC (47 – 63 Hz)
	Ripple 1 ns p-p	Power	20W
Phase noise	10 Hz -45 dBc	Connector	IEC 603320 10A
	100 Hz -73 dBc	Monitor and Control	
	1000Hz -83 dBc	RS 485	DB9
	10 kHz -93 dBc	RS 232	DB9
	100 kHz -103 dBc	Environmental	
	1 MHz -115 dBc	Operational	0°C to +50°C standard
Reference		Storage	-55°C to +85°C
Internal reference stability	+/- 2 x 10 <sup>-8</sup> / day	Humidity	Non-condensing
Aging	+/- 1 x 10 <sup>-7</sup> / year	Altitude	3,000m AMSL

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