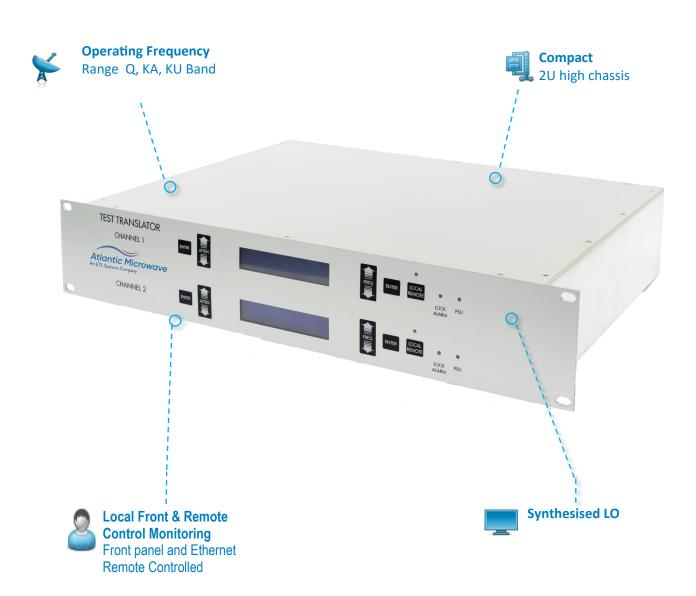


Test Loop Translator and Noise Injection—Combined System

The LNI series of Noise Injection Loop Test Translator Systems provide the satellite communications engineer with a complete and versatile set up for off-satellite loop back testing of the transmit (Tx) signal to L-band combined with the ability to inject white symmetrical gaussian noise for simultaneous receiver and modem testing.

Typical applications:

- Ku Band and Q Band Models
- Provides Loop Back Translation Tx to L-Band
- And variable L-band noise injection
- Local & remote, ethernet control
- Versatile and comprehensive test system
- Tests RF chain and receiver/ modem in one



















General Specification		Attenuation Steps	0.25dB			
LO Frequency Steps	25MHz	Noise Coupling Factor	20dB nom.			
LO Reference	10MHz Int/Ext	Noise Level Control	Front Panel Up/Down Buttons & LCD Readout Remote via Ethernet with GUI			
Internal Ref. Stability	+/-0.05ppm over 0+50C	TYOISE EGYET CONTROL				
Internal Ref. Ageing	+/-0.1ppm/year	Noise Mute Function	Local & Ethernet			
Maximum Input Level	0dBm	Con	Combined System			
Conversion Loss	0dBm nom		Ku—SMA Female			
Conversion Loss Flatness	+/-2dB typ. +/-0.5dB/40MHz max	Tx Input Connector	KA—2.92mm Female			
Attenuation Range	60dB min		Q- 2.4mm Female			
Attenuation Steps	0.5dB	L-band Output Connector	SMA Female			
Impedance	50 ohms	Ext Ref Input Connector	BNC Female			
Input VSWR	1.8:1 typical	Noise Output Connector	SMA Female			
Output VSWR	1.8:1 typical	Ethernet Connector	RJ45x2			
Signal Related Spurious	-25dBc typical	Input Power	80-240V, 50/60Hz			
LO Related Spurious & Harmonics	-30dBm typical	Input Power Connector	IEC with Fuse			
Non Signal or LO Related	-60dBm minimum	Dimensions	19" x 2U x 13.5" (343mm) excl. con- nectors & protrusions			
Attenuation & LO Frequency Control	Attenuation & LO Frequency Control	Fixed LO Phase N	Noise dBc/Hz (typical) (GHz)			
Noise Generator		Offset Frequency (Hz)	12.0	27.0	43.0	
Noise Frequency Range	10-2600MHz	100	-65	-60	-50	
Total Noise Power	+10dBm nom	1K	-75	-70	-65	
Base Noise Density	=84dBm/Hz	10K	-80	-75	-70	

General Specification					
Model Number	Input Frequency Range	Output Frequency Range	LO Frequency Range		
LNI-1180-1305-Ku	12.75-14.5GHz	0.8-2.6 GHz	11.80-13.05 GHz		
LNI-2500-2700-Ka	27.5-31.5GHz	0.8-2.6 GHz	25.0-27.0 GHz		
LNI-4250-4400-Q	43.5-45.5GHz	0.8-2.6 GHz	42.5-44.0 GHz		

100K

1M

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

ATLANTIC MICROWAVE 40a Springwood Drive Braintree Essex England CM7 2YN

Noise Flatness

Noise Attenuation Range

TELEPHONE +44 (0)1376 550220 EMAIL sales@atlanticmicrowave.com

+/-1.5dB typ.

60dB min.

FACSIMILE +44 (0)1376 552145 WEB www.atlanticmicrowave.com





-80

-110

-80 -115 -70

-105