

Test Loop Translator - Synthesised LO– Ethernet Control

The ALR series of Ka Band and Ku Band Test Loop Translators feature Synthesised Variable Frequency Local Oscillators (LOs) to provide the user with the most versatile and comprehensive operating configurations for translation of uplink (Tx) frequencies to either downlink (Rx) frequencies or to L-Band, and for L-Band to downlink (Rx).

- Ka & Ku band
- All Frequency Combinations
- Tx-Rx, Tx-L & L-Rx Conversations
- Full Versatile
- Local & Remote Ethernet Control for LO Frequency & Signal Attenuation
- External or Internal 10MHz Reference
- Standard & Custom Options+
- Special Custom Options

 Operating frequency
Ka & Ku Band

 Compact
1U high chassis



 Local Front & Remote
Control Monitoring
Front panel and Ethernet
Remote Controlled

 Gain
-35dB nom.
Conversion
Gain

General Specifications	
LO Frequency Steps	25MHz
Maximum Input Level	+10dBm
Conversion Gain	-35dB nom. (see options)
Conversion Gain Flatness	+/-2dB typ. +/- 0.5dB/40MHz max.
Attenuation Range	30dB Min. (see options)
Attenuation Control	0.25dB Steps
Impedance	50 ohms
Input VSWR	1.8:1 typ. (see options)
Output VSWR	1.8:1 typ. (see options)
Signal Related Spurious	-25dBc typ.
LO Related Spurious & Harmonics	-30dBm typ.
Non Signal or LO Related Spurious	-60dBc min.
Lock Alarm	LED, Front Panel & Ethernet
Input Connector (see options)	SMA Female
Output Connector	SMA Female
Reference Input Connector	BNC Female
Ethernet Connector	RJ45

Power	
Input Power	80-240V, 50-60Hz
Input Power Connector	IEC with Fuse

Environmental	
Operating Temperature	0 to +50C (see options)
Storage Temperature	-10 to +70C

Physical	
Dimensions	19" x 1U x 13.5" (343mm) incl. connectors & protrusions

Phase Noise (dBc/Hz) (typical)				
Offset Frequency (Hz)	LO Frequency (GHz)			
	2.0	10.0	12.0	27.0
100	-77	-72	-70	-63
1K	-90	-83	-80	-75
10K	-100	-85	-85	-78
100K	-100	-90	-85	-80
1M	-132	-117	-115	-109
10M	-140	-138	-135	-128

- Options:**
- TLT01 1.0dB Attenuation Steps
 - TLT02 Input/Output Filters for 60dB Isolation
 - TLT03 LO Filter for 60dB LO Rejection
 - TLT04 Input/Output Isolators for 1.3:1 VSWR
 - TLT05 Outdoor Weatherproof Housing -20 to +70C (No LCD)
 - TLT06 Internal Battery Charger

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.

