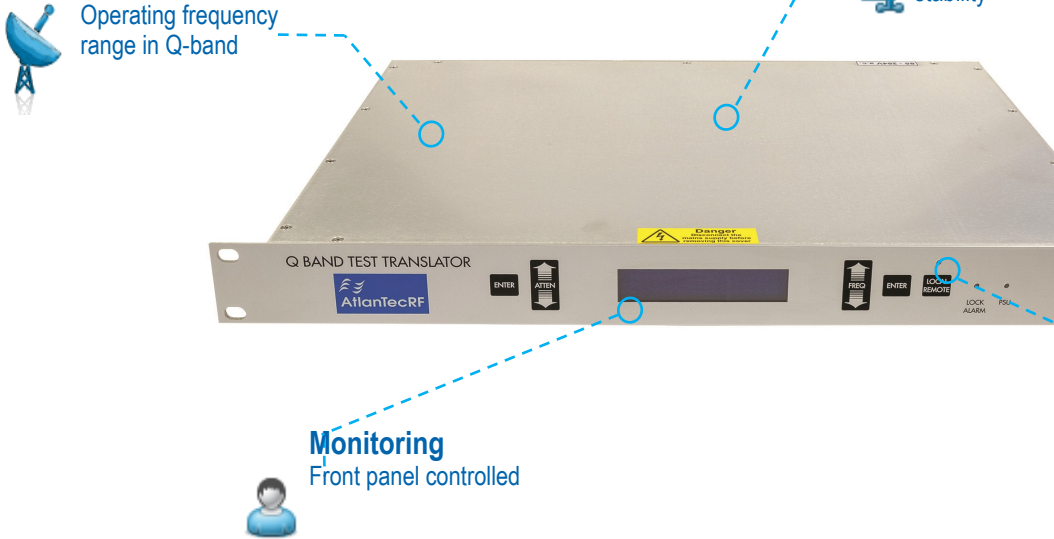


# Test Loop Translator - Q Band Synthesised LO—Ethernet Control

The ALR series of Q Band Loop Test 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)

- Simulates Satellite Link
- All Frequency Combinations
- All Frequency Conversions—Tx-Rx, Tx-L & L-Rx
- Fully Versatile
- Local & Remote ethernet Control for LO Frequency & Signal Attenuation
- External or Internal 10MHz reference
- Standard & Custom Options



General Specifications	
LO Frequency Steps	25MHz
Maximum Input Level	0dBm
Conversion Gain	-35dB nom. (see options)
Conversion Gain Flatness	+/-2 dB typ. +/-0.5dB/40MHz max.
Attenuation Range	30dB Steps (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)	2.4mm Female
Output Connector	SMA Female
Reference Input Connector	BNC Female
Ethernet Connector	RJ45

### 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

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 (MHz)		
	19.0	25.0	43.0
100	-60	-60	-50
1K	-75	-70	-65
10K	-80	-75	-70
100K	-80	-80	-70
1M	-110	-110	-105

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.

