

Test Loop Translator - Fixed LO

The ALT series of Test Loop Translators are designed to replace the satellite link for test and alignment of earth station systems operating in S, C, X, Ku or DBS frequency bands. Incorporating fundamental frequency phase locked oscillators and double balanced mixers, the translators block convert frequencies from uplink to either downlink or L-Band and from L-Band to downlink for instantaneous monitoring of frequency, power levels and modulation. The input path contains a front panel controlled continuously variable attenuator for reducing input power levels. Each unit also provides a reference frequency output and LO lock alarm.

Typical applications:

- Synthesised LO
- Simultaneous Operation
- Local & Remote Ethernet Control
- Extremely Versatile
- Standard & Custom Options



Operating Frequency
Range in S, C, X, Ku & DBS Bands



Compact
1U high chassis



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



Synthesised LO



General Specification	
Maximum Input Level	+10dBm
Conversion Gain	-20dBm
Conversion Gain Flatness	+/-2dB typ. +/-0.5dB/40MHz max
Attenuation Range	30dB
Impedance	50 ohms
Input VSWR	1.8:1 typical
Output VSWR	1.8:1 typical
Signal Related Spurious	-50dBc typical
LO Related Spurious & Harmonics	-50dBm typical
Lock Alarm	LED, Front Panel & Ethernet
Input Power Connector	IEC with fuse
RF Input Connector	SMA Female
RF Output Connector	SMA Female
Reference Input Connector	SMA Female
Ethernet Connector	RJ45
Input Power	80-240V, 50-60Hz
Input Power Connector	IEC with Fuse
Operating Temperature	0 to +50C
Storage Temperature	-10 to +70C
Dimensions	19" x 1U x 13.5" (343mm) excl. connectors & protrusions

Fixed LO Phase Noise dBc/Hz (typical) (GHz)						
Offset Frequency	650MHz	1750MHz	3050MHz	5100MHz	7400MHz	13050MHz
100Hz	-76	-75	-66	-60	-56	-53
1KHz	-80	-78	-76	-92	-90	-85
10KHz	-115	-110	-100	-105	-100	-95
100KHz	-122	-120	-118	-112	-110	-105
1MHZ	-132	-130	-128	-125	-120	-115

General Specification				
Model Number	Translation Bands	Input Frequency Range (MHz)	Output Frequency Range (MHz)	LO Frequency Range (MHz)
ALT-0175-S	S Tx-Rx	2025-2125	2200-2300	175
ALT-1075-S	S Tx-L	2025-2125	950-1050	1075
ALT-1250-S	S L-Rx	950-1050	2200-2300	1250
ALT-2225C	C Tx-Rx	5845-6425	3620-4200	2225
ALT-4975-C	C Tx-L	5845-6425	950-1450	4975
ALT-2750-C	C L-Rx	950-1450	3700-4200	2750
ALT-7375-CI	C Tx-L (inv)	5925-6425	1450-950	7375
ALT-0650-X	X Tx-Rx	7900-8400	7250-7750	650
ALT-6950-X	X Tx-L	7900-8400	950-1450	6950
ALT-6300-X	X L-Rx	950-1450	7250-7750	6300
ALT-1800-Ku	Ku Tx-Rx	12750-13250	10950-11450	1800
ALT-2050-Ku	Ku Tx-Rx	12750-13250	10700-11200	2050
ALT-11800-Ku	Ku Tx-L	12750-13250	950-1450	11800
ALT-1750-KuE	KuE Tx-Ku Rx	13750-14500	12000-12750	1750
ALT-2300-KuE	KuE Tx-Ku Rx	13750-14500	11450-12200	2300
ALT-2800-KuE	KuE Tx-Ku Rx	13750-14500	10950-11700	2800
ALT-3050-KuE	KuE Tx-Ku Rx	13750-14500	10700-11450	3050
ALT-12800KuE	KuE Tx-L	13750-14500	950-1700	12800
ALT-11050-Ku	Ku L-Rx	950-1700	12000-12750	11050
ALT-10500-Ku	Ku L-Rx	950-1700	11450-12200	10500
ALT-10000-Ku	Ku L-Rx	950-1700	10950-11700	10000
ALT-9750-Ku	Ku L-Rx	950-1700	10700-11450	9750
ALT-11300-Ku	Ku L-Rx	950-1450	12250-12750	11300
ALT-10750-Ku	Ku L-Rx	950-1450	11700-12200	10750

General Specification				
Model Number	Translation Bands	Input Frequency Range (MHz)	Output Frequency Range (MHz)	LO Frequency Range (MHz)
ALT-1750-Ku	Ku Tx-Rx	14000-14500	12250-12750	1750
ALT-2300-Ku	Ku Tx-Rx	14000-14500	11700-12200	2300
ALT-2550-Ku	Ku Tx-Rx	14000-14500	11450-11950	2550
ALT-3050-Ku	Ku Tx-Rx	14000-14500	10950-11450	3050
ALT-13050-Ku	Ku Tx-L	14000-14500	950-1450	13050
ALT-5100-DBS	DBS Tx-Rx	17300-17800	12200-12700	5100
ALT-5178-DBS	DBS Tx-Rx	17300-17800	12122-12622	5178
ALT-5600-DBS-A	DBS Tx-Rx	17300-17800	11700-12200	5600
ALT-5600-DBS-B	DBS Tx-Rx	17300-18100	11700-12500	5600
ALT-5600-DBS-C	DBS Tx-Rx	17300-18100	12200-12500	5600
ALT-7400-DBS	DBS Tx-Rx	18100-18400	10700-11000	7400
ALT-16350-DBS-A	DBS Tx-L	17300-17800	950-1450	16350
ALT-16350-DBS-B	DBS Tx-L	17300-18100	950-1750	16350
ALT-16350-DBS-F	DBS Tx-L	17300-18400	950-2050	16350
ALT-168350-DBS	DBS Tx-L	17800-18100	950-1250	16850
ALT-17150-DBS	DBS Tx-L	18100-18400	950-1250	17150
ALT-11250-DBS	DBS L-Rx	950-1450	12200-12700	11250
ALT-11172-DBS	DBS L-Rx	950-1450	12122-12622	11172
ALT-10750-DBS	DBS L-Rx	950-1750	11700-12500	10750
ALT-9750-DBS	DBS L-Rx	950-1250	10700-11000	9750

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.

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