

Test Loop Translator - Reversible Signal Path

The PRT series of Ka and Ku Band Test Loop Translators feature technology to achieve reversible operation with the ability to introduce different transfer characteristics in the forward and reverse paths.

In this way, one TLT instrument can be used in a variety of test applications for frequency conversions from Uplink (Tx) to Downlink (Rx) or to L-Band and from L-Band to Downlink (Rx).

Forward and reverse paths may have different values of Conversion Gain, Attenuation Range, Filtering Characteristics and LO Frequency. Instruments are essentially customised for the desired applications parameters.

Typical applications:

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



Operating Frequency
Range in Ka & Ku Band



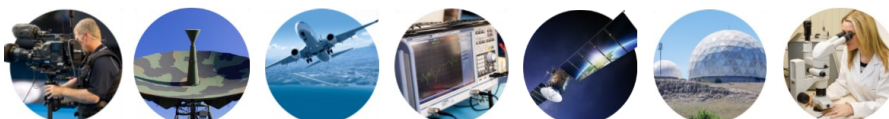
Compact
2U high chassis



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



Synthesised LO



General Specification		Environmental				
Maximum Input Level	+10dBm	Operating Temperature		0 to +50C (see options)		
Conversion Gain Flatness	+/-2dB typ. +/-0.5dB/40MHz max	Storage Temperature		-10 to +70C		
Impedance	50 ohms	Physical				
Input VSWR	1.3:1 typical	Dimensions		19" x 2U x 13.5" (343mm) excl. connectors & protrusions		
Output VSWR	1.3:1 typical					
Signal Related Spurious	-25dBc typical	Fixed LO Phase Noise dBc/Hz (typical) (GHz)				
LO Related Spurious & Non Signal or LO Related	-30dBm typical -60dBm minimum	Offset Frequency	2.0	10.0	12.0	27.0
Lock Alarm	LED, Front Panel & Ethernet	100Hz	-80	-70	-65	-60
Input Connector	2.92mm Female Ka band SMA Female Ku Band	1KHz	-90	-85	-75	-70
Output Connector	SMA Female	10KHz	-95	-90	-80	-75
Reference Input Connector	BNC Female	100KHz	-95	-90	-80	-80
Ethernet Connector	RJ45	1MHZ	-120	-115	-115	-110
Power						
Input Power	80-240V, 50-60Hz					
Input Power Connector	IEC with Fuse					

General Specification				
Model Number	Direction	Input Frequency Range	Output Frequency Range	LO Frequency Range
PRT-Ka-1001	Forward Path	27.5-31.5GHz	0.95-1.70 GHz	26.55-29.80GHz
	Reverse Path	0.95-1.70 GHz	17.7-21.2GHz	16.75-19.50GHz
PRT-Ku-1002	Forward Path	12.75-14.5GHz	0.95-1.70 GHz	11.80-13.05GHz
	Reverse Path	0.95-1.70 GHz	10.7-12.75GHz	9.75-11.05GHz

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

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

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

