

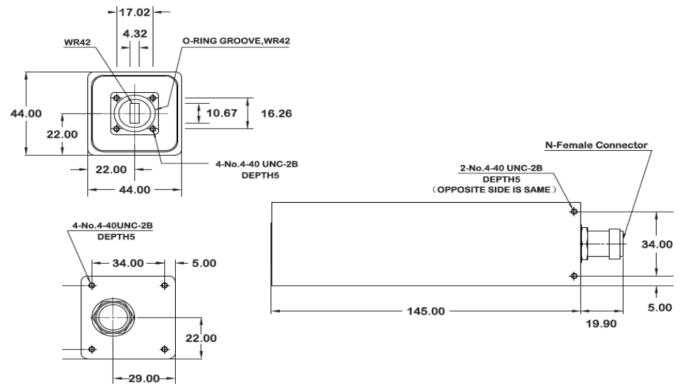
Orbital Ka-Band LNB with Multiple Local Oscillators



This Ka-band low noise block downconverter (LNB) uses multiple local oscillators to let you switch between different Ka frequency bands in the 19.20 to 21.20 GHz range. It provides user bandwidth of up to 1 GHz and offers exceptional performance for commercial and military satellite communication (SATCOM) applications.

- Switchable between different Ka frequency bands
- Local or remote band switching for flexibility in the field
- Flat frequency response for higher-order modulation schemes
- High data throughput and low bit error rate (BER)
- Internal isolators for impedance matching and maximum signal transfer
- Options for high temperatures and temperaturecompensated gain
- Airborne version available for in-flight connectivity

The external reference LNB supports Global Xpress (GSX) and Wideband Global SATCOM (WGS) configurations as well as commercially available Ka High Throughput Satellites (HTS). It delivers the gain, phase noise and linearity needed to handle higher-order modulation schemes in both the GEO and LEO satellite markets. Used in ARSTRAT qualified terminals.



MODEL NUMBER: Ka MULTILO EXT REF



FREQUENCY RANGE	
RF Frequency Band (GHz)	19.2 to 21.2
IF Frequency Band (MHz)	950 to 2100
Bandwidth (MHz)	1 GHz bands
Local Oscillator (GHz)	17.25 to 20.25
Noise Figure (dB)	1.5 max
LO Stability	Locked to external reference
LO Phase Noise	Locked to external reference
Band Switching	Voltage
10 MHz REFERENCE	
Insertion	via input connector
Input Level	-10 to 0 dBm
VSWR	
Input	1.3:1
Output	2.0:1
GAIN	
Gain (dB)	60
Flatness	+/- 1.5 dB over frequency
Ripple	+/- 0.3 dB over any 10 MHz
Stability	+/- 0.25 dB over 24 hrs @ 25C
OTHER SPECS	
Image Rejection	-40 dBm min
LO Leakage	-45 dBm
1 dB Compression (dBm)	+10 min
OIP3 (dBm)	+20 min
Desense Level	-20 dBM transmit signal results in no more than 0.1 dB of NF degradation
ENVIRONMENTAL	
Operating Temp	-40°C to +60°C
Humidity	100% condensing
Trainficity	
MTBF	> 250,000 hours

POWER		
Current Draw	5 watts max	
Input Voltage Range	15 to 26 VDC	
MECHANICAL		
Weight (grams)	485	
Length (mm)	145	
Width (mm)	44	
Depth (mm)	44	
Input Connector	WR-42	
Output Connector	N or SMA	
OPTIONS		
Push button band switching		
RS 422 via micro DB9 switching		
Extended temperature ranges		
Airborne version available		



PUSH BUTTON BAND SWITCHING

Please contact Orbital Research for ordering information: sales@orbitalresearch.net