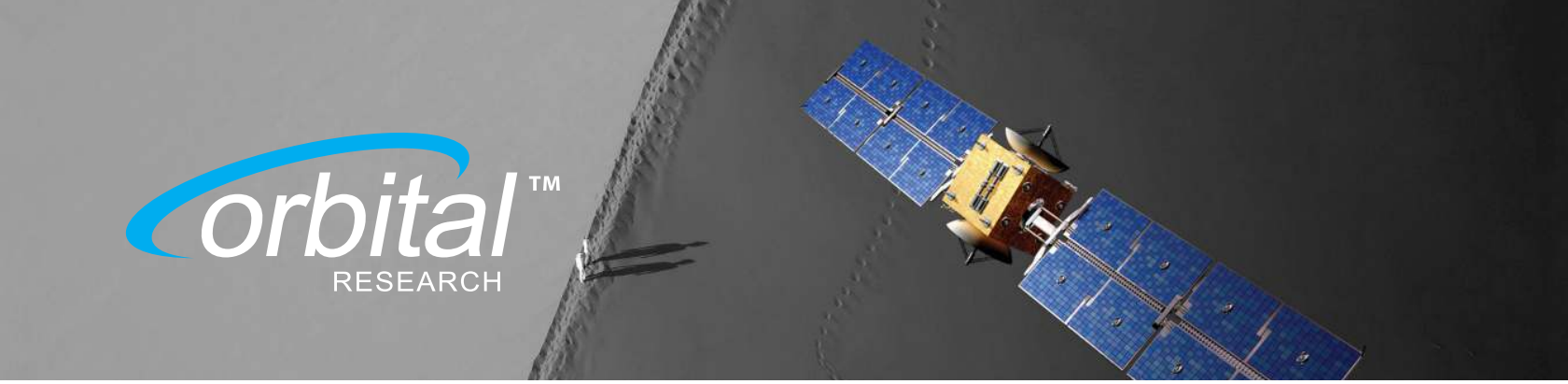
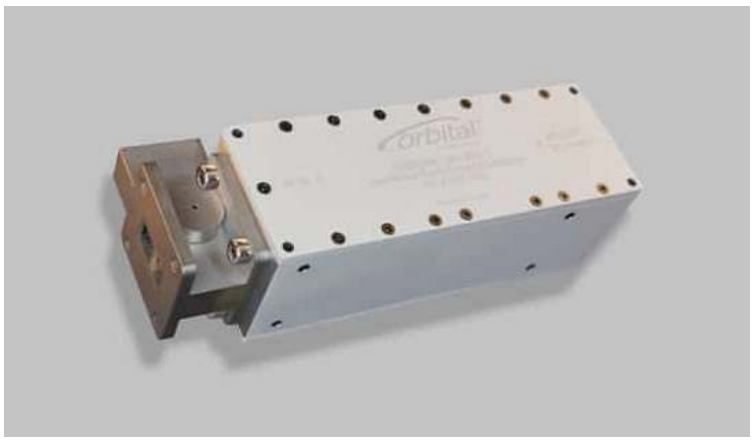


Orbital Ku-Band LNB with Multiple Local Oscillators

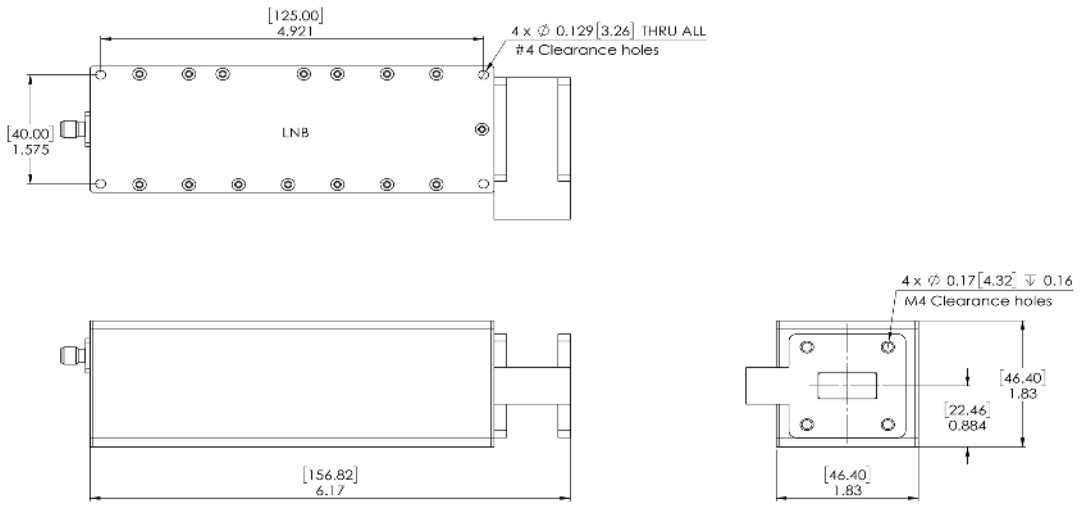


Our Ku-band low noise block downconverter (LNB) with multiple local oscillators is built for terrestrial and airborne satellite terminals. It lets you switch between different Ku frequency bands in the 10.7 GHz to 12.75 GHz range – and offers 1.05 GHz of bandwidth per LO. This LNB makes it possible to support several services with the same hardware.

It offers:

- Local or remote Ku band switching and user-selectable gain
- Exceptionally low phase noise for maximum data throughput
- Low noise figure <0.8 dB for excellent signal to noise ratios
- Flat frequency response for higher-order modulation schemes
- Options for extreme temperatures
- External reference or PLL variants
- Airborne version available for in-flight connectivity

The Orbital Ku-Band LNB with Multiple Local Oscillators is used for both military and commercial satellite communication applications, including large earth stations and SATCOM-on-the-Move (SOTM). Aeronautical versions are available to help carriers meet rising demand for bandwidth and reliable in-flight broadband connectivity.



MODEL NUMBER: Ku MULTILO EXT REF

FREQUENCY RANGE	
RF Frequency Band (GHz)	10.7 to 12.75
IF Frequency Band (MHz)	950 to 2150
Bandwidth (MHz)	1050 max
Local Oscillator (GHz)	9.75 to 11.30
Noise Figure (dB)	0.8 @ 25C
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	-8 dBm to +8 dBm

VSWR	
Input	1.4:1 nominal with isolator
Output	1.3:1 nominal

GAIN	
Gain (dB)	55 nominal
Flatness	+/- 2.5 over frequency
Ripple	+/- 0.5 dB over any 10 MHz
Stability	+/- 0.25 dB over 24 hrs @ 25C

OTHER SPECS	
Image Rejection	> 40 dBc max
1 dB Compression (dBm)	+ 13 dB min
OIP3 (dBm)	+25 dBM min

ENVIRONMENTAL	
Operating Temp	-40°C to +65°C
Non-Operating Temp Range	-50C to +80C
Humidity	100% condensing
MTBF	> 125,000 hours
Standards	MIL-STD-810F for vibration

POWER[1]	
Current Draw	350 mA at 18 VDC
Input Voltage Range	+17 to +24 VDC

MECHANICAL	
Weight (grams)	675 without isolator
Length (mm)	157 mm/6.17 inches
Width (mm)	47 mm/1.83 inches
Depth (mm)	47 mm/1.83 inches
Input Connector	WR-75
Output Connector	SMA, N

OPTIONS
Push button or RS 422 band switching
PLL versions available
Gain modifications, 40 and 50 dB
Custom LO's available
Temperature compensated gain +/-0.75 dB over freq and -20C to +55C
Extended temperature ranges
Airborne version available

PUSH BUTTON OPTION

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

[1] Power supplies must meet 100 mV maximum ripple and noise