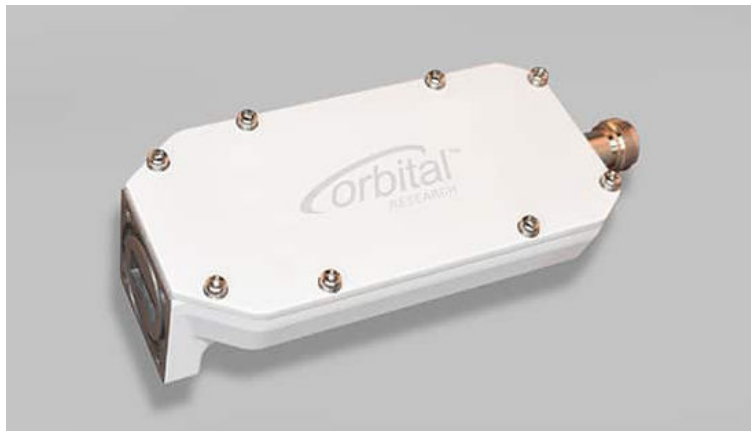
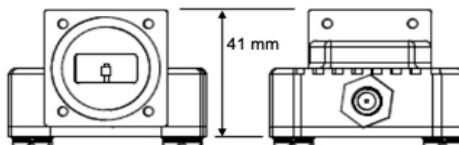
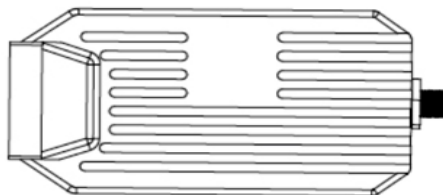
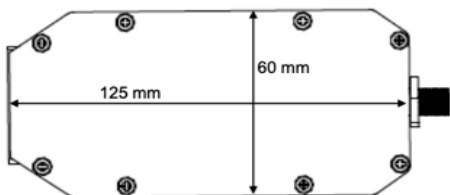




## Orbital 5300 Enhanced Ku-Band PLL LNB



This entry-level Ku-band Phase Lock Loop (PLL) LNB is enhanced to meet customer-specific requirements. It offers extended bandwidth of up to 1050 MHz with 40 to 60 dB gain – and is customizable for wideband applications between 10.70 GHz and 12.75 GHz. The LNB provides excellent performance for consumer video and broadband applications, as well as DVB-2 and DVB-2X waveforms.



FREQUENCY RANGE	
RF Frequency Band (GHz)	10.70 to 12.75
IF Frequency Band (MHz)	950 to 2100
Bandwidth (MHz)	1050 max
Local Oscillator (GHz)	9.75, 10.75, 11.30
Noise Figure (dB)	0.7 nominal, 0.8 for wideband (1GHz)
LO Stability	+/- 10 kHz over temp
LO Phase Noise	-80 dBc @ 1 kHz

VSWR	
Input	2.2:1 nominal
Output	1.5:1 nominal

GAIN	
Gain (dB)	60 nominal
Flatness	+/- 1.5 dB over the band
Ripple	+/- 1.0 dB over any 36 MHz
Stability	+/- 2 dB over temp & freq

OTHER SPECS	
1 dB Compression (dBm)	+10 dB at 750 MHz, +7 at 1 GHz
OIP3 (dBm)	+20 dB at 750 MHz, +17 at 1 GHz

ENVIRONMENTAL	
Operating Temp	-40 to +60 C
Humidity	100% condensing
MTBF	> 175,000 hours
Standards	RoHS and REACH

POWER <sup>1</sup>	
Current Draw	220 mA
Input Voltage Range	+12 to +24 VDC

MECHANICAL	
Weight (grams)	350
Length (mm)	125
Width (mm)	60
Depth (mm)	41
Input Connector	WR-75
Output Connector	F, N, SMA, TNC

OPTIONS	
Gain modifications, 40 and 50 dB	
Custom LO's available	
Temperature compensated gain +/-0.75 dB over freq and -20C to +55C	

Please contact Orbital Research for ordering information: [sales@orbitalresearch.net](mailto:sales@orbitalresearch.net)

<sup>1</sup> Power supplies must meet 100 mV maximum ripple and noise