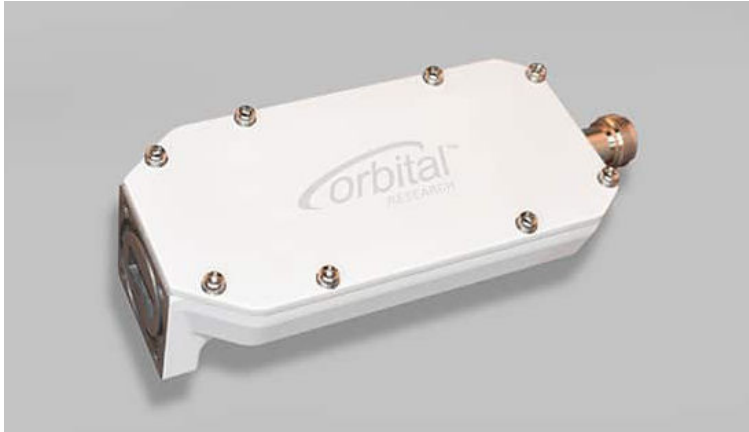


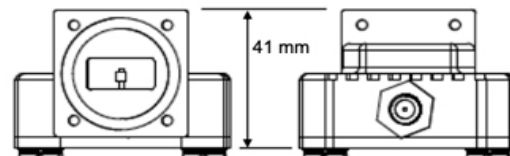
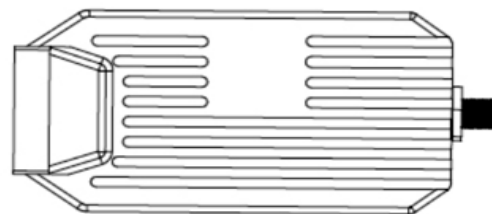
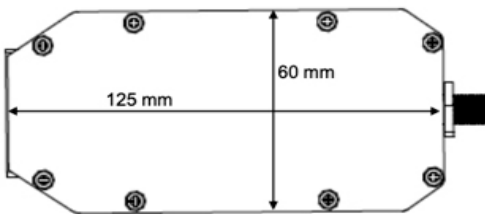


Orbital 5400X Enhanced External Reference Ku-Band LNB



This external reference Ku-band LNB is enhanced to meet demanding, customer-specific SATCOM requirements such as superior gain flatness, excellent VSWR performance, or extreme temperatures. It offers extended bandwidth up to 1050 MHz – and is available in a variety of wideband Ku frequency ranges.

- Customizable LNB for unique installations
- External 10 MHz reference
- Wideband Ku frequency ranges
- Excellent noise figure and gain flatness
- Superior VSWR performance
- Extended temperature ranges



FREQUENCY RANGE

RF Frequency Band (GHz)	10.7 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
LO Stability	Locked to external reference
LO Phase Noise	Locked to external reference

10 MHz REFERENCE

Insertion	via input connector
Input Level	-8 dBm to 0 dBm

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

Image Rejection	> 45 dBc max
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°C to +60°C
Humidity	100% condensing
MTBF	> 175,000 hours
Standards	RoHS and REACH

POWER¹

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

¹ Power supplies must meet 100 mV maximum ripple and noise