



## Orbital Ka-Band LNB with Fixed LO & Internal Isolator

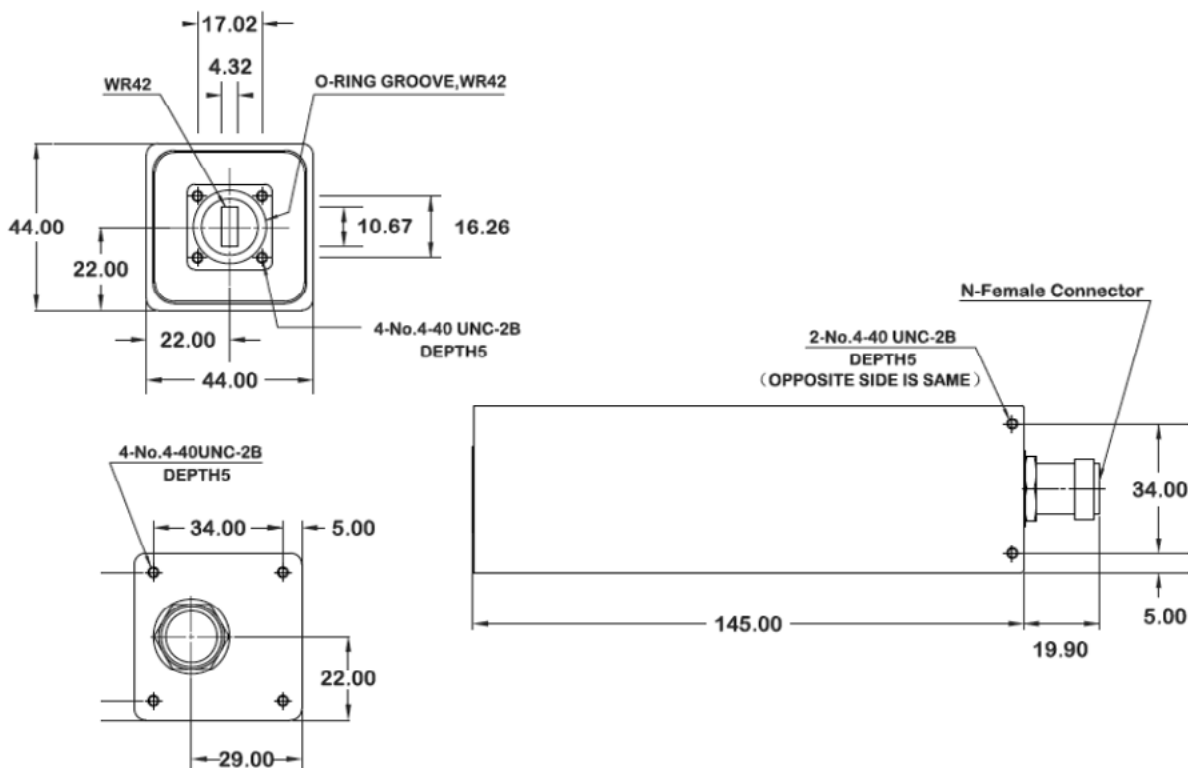


This external reference Ka LNB is a compact, completely sealed unit with a built-in isolator. Great for use with WGS or Global Express Satellites

It provides the same exceptional performance as the Orbital 694XA Ka-Band LNB with Fixed Local Oscillator but can fit into tighter spaces than a unit with an external isolator – and lowers the risk of water leakage. This LNB has a fixed LO and is available in the 19.20 to 21.20 GHz frequency range. It offers:

- Integrated Ka LNB and isolator – no gaskets required
- Superb VSWR performance and data throughput
- Options for high temperatures and temperature-compensated gain

This LNB is designed for both commercial and military satellite communications. It's used in ARSTRAT-certified terminals and complies with MIL-STD-188-164a and MIL-STD-810F.



## FREQUENCY RANGE

RF Frequency Band (GHz)	19.2 to 21.2
IF Frequency Band (MHz)	950 to 1950
Bandwidth (MHz)	1000 max
Local Oscillator (GHz)	18.25 to 19.25
Noise Figure (dB)	1.4 max
LO Stability	Locked to external reference
LO Phase Noise	Locked to external reference

## 10 MHz REFERENCE

Insertion	via input connector
Input Level	-10 to +5 dBm

## VSWR

Input	1.4:1 nominal
Output	1.3:1 nominal

## GAIN

Gain (dB)	60 nominal
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

## ENVIRONMENTAL

Operating Temp	-40°C to +60°C
Non-Operating Temp Range	-50 to +70 C
Humidity	100% condensing
MTBF	> 125,000 hours
Standards	RoHS and REACH

## POWER<sup>1</sup>

Current Draw	300 mA
Input Voltage Range	+12 to +24 VDC

## MECHANICAL

Weight (grams)	485
Length (mm)	128
Width (mm)	44
Depth (mm)	44
Input Connector	WR-42
Output Connector	F, N, SMA

## OPTIONS

Extended temperature to +90C
Custom LO's available
Gain modifications, 55 and 65 dB

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