



Orbital Ka-Band Multi-LO LNB

Ka-band LNB with multiple local oscillators



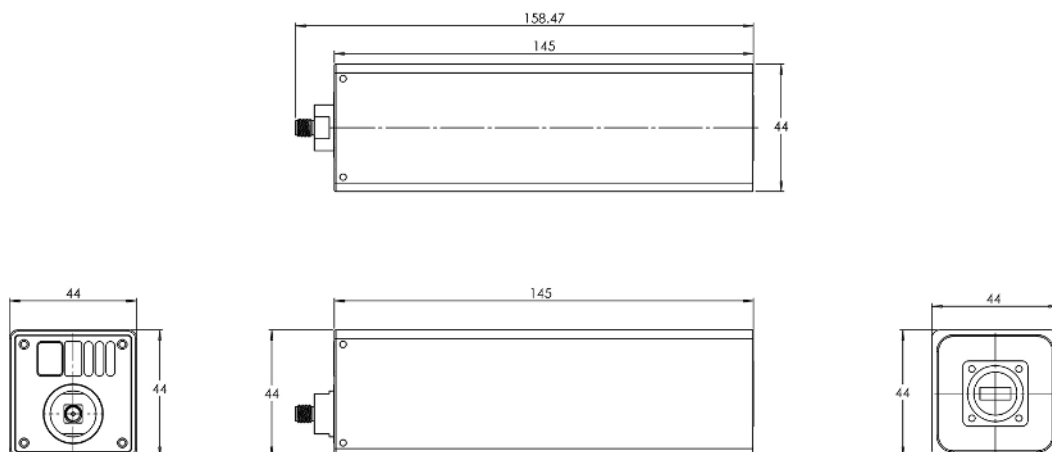
This Ka-band low noise block downconverter (LNB) uses multiple local oscillators to let you switch between different Ka frequency bands. It provides user bandwidth of up to 1 GHz – and offers exceptional performance for both commercial and military satellite communications (SATCOM) applications.

Orbital Ka-Band Multi-LO LNB features

- Local or remote Ka band switching
- Linearity for higher-order modulation schemes
- High data throughput and low bit error rate
- Internal isolators for maximum signal transfer
- Options for high temperatures and temperature-compensated gain

Applications

The Ka-Band Multi-LO 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 – and provides maximum customer throughput using small aperture antennas.



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)	18.25, 19.2
Noise Figure (dB)	1.5 typical
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 VSWR	1.3:1
Output VSWR	2.0:1

GAIN

Gain	60 dB
Flatness	+/- 1.5 dB over 1 GHz
Ripple	+/- 0.15 dB over any 10 MHz
Stability	+/- 0.25 dB over 24 hrs @ 25C

ENVIRONMENTAL

Operating Temp Range	-40 to +60C
Humidity	100% condensing
Standards	RoHS and REACH

MECHANICAL

Weight	500 grams
Length	145 mm
Width	44 mm
Depth	44 mm
Input Connector	WR-42
Output Connector	N or SMA

POWER

Current Draw	5 watts max
Input Voltage Range	15 to 26 VDC

OPTIONS

Push-button band switching
RS485 via micro DB9 switching
Extended temperature ranges
Custom gain settings
Increase linearity
Alternate LO frequencies: 18.2, 18.55, 18.7 GHz

OTHER SPECS

Image Rejection	-45 dBm max
LO Leakage	-45 dBm max
1 dB Compression	+10 dBm min
OIP3	+20 dBm min
Desense Level	-50 dBm transmit signal results in no more than 0.1 dB of NF degradation

For more information or to order, please contact us at sales@orbitalresearch.net or 1 (604) 419-8585.