

Orbital Wideband Ka-Band LNB

Description

This commercial satellite converter offers industry-leading performance at an affordable price.

Features

Switchable Filters: get exceptional image rejection on the bands you need.

Lowest Noise Figure in the industry gives your systems a competitive edge in the market.

Highest P1dB in satcom means you get the best linearity possible with high gain antennas

Superb Gain Flatness: you get the best throughput possible for your terminals.

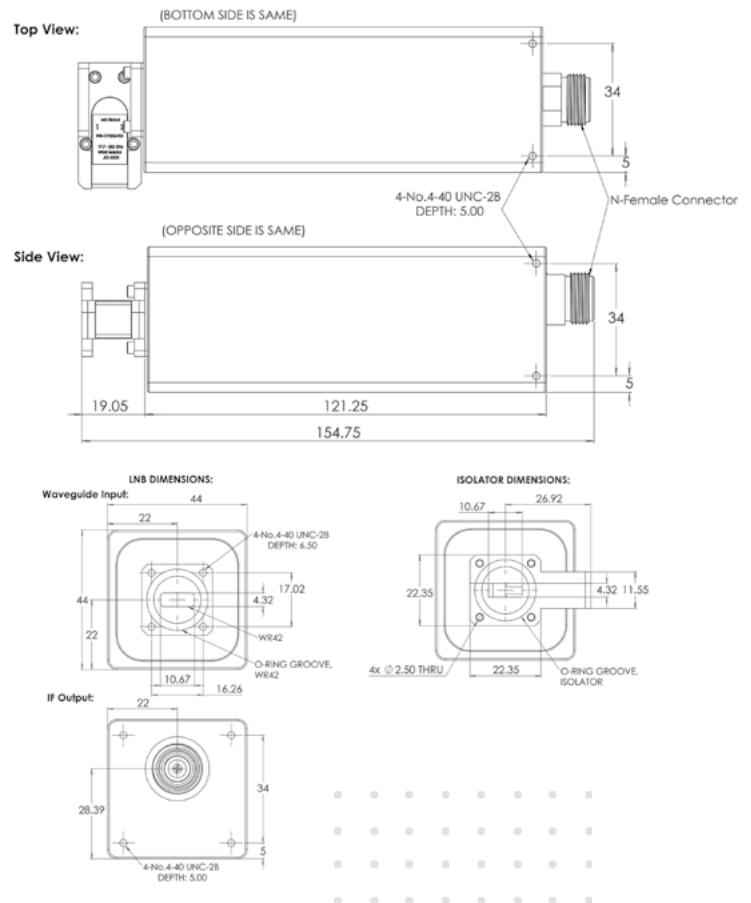
Applications

This model is made for mission-critical systems that need predictable and reliable performance.

- Oil & Gas remote operations with complex data requirements
- Commercial/shipping projects with large volumes of data in diverse regions
- Tier 1 and 2 users with large, complex, global data networks



Mechanical Diagram



Orbital Wideband Ka-Band LNB

Specifications

FREQUENCY RANGE

RF Frequency Band (GHz)	18.2 to 20.2
IF Frequency Band (MHz)	950 to 2000
Bandwidth (MHz)	100 to 1000
Local Oscillator (GHz)	17.25 to 19.25
Noise Figure (dB) Typ	1.0 dB to 1.3 dB
LO Stability	Locked to Ext Reference
LO Phase Noise	Locked to Ext Reference
Band Switching	Voltage/tone

EXTERNAL REFERENCE

Insertion	Via Input Connector
Input Level	0 to + 10 dBm

VSWR

Input (typ)	1.3:1
Output (typ) 1 GHz BW	1.5:1

GAIN

Gain (dB)	60 dB min
Flatness (over any 1 GHz)	+/- 1.5 dB

OUTPUT PHASE NOISE (TYP) - 10 MHz EXT REF

10 Hz	-55 dBc/Hz
100 Hz	-77 dBc/Hz
1 KHz	-82 dBc/Hz
10 KHz	-83 dBc/Hz
100 KHz	-92 dBc/Hz
1 MHz	-115 dBc/Hz

OTHER SPECS

Image Rejection (typ)	50 dB
LO Leakage (typ)	< -60 dBm
1 dB Compression (dBm) @ 60 dB gain	+15
OIP3 (dBm) @ 60 dB gain	+25
Overdrive Power Level (Non-damaging)	-20 dBm
Desense Level	-40 dBm transmit signal results in no more than 0.1 dB of NF degradation

ENVIRONMENTAL

Operating Temperature	-40 to +60C
Survival Temperature	-55 to +85C
Humidity	100% condensing
MTBF	250,000 hrs
Standards	RoHS, REACH, IP67

POWER

Input Voltage Range	10 to 28 VDC
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MECHANICAL

Weight (grams)	500
Dimensions (mm)	44 x 44 x 154
Input Connector	WR-42
Output Connector	SMA or N

OPTIONS

Internal Reference	Option
External Reference with Auto Internal Fall Back	Option