



K-Band Earth Observation LNB



Increase data throughput for big bandwidth earth observation (EO) applications like remote sensing or satellite tracking, telemetry and command (TT&C) – with the Orbital K-Band EO Low Noise Block Downconverter (LNB).

As popular frequency bands like X become congested, K-band offers new opportunities for earth observation satellites. This wideband LNB gives users the ability to download massive volumes of

EO data over the K-band frequency – even during short satellite passes. Additionally, its low noise figure means you can use a smaller, less expensive receiving terminal.

- Very low phase noise and DVB-S2X compliance for maximum data throughput
- Low noise figure and flat frequency response for maximum G/T
- Local oscillator flexibility for custom L-band frequency conversions
- Aluminum sealed enclosure for extreme conditions – IP67 and RF isolation

The Orbital K-Band EO LNB is used for optical imaging, radar imaging and remote sensing satellites – and is perfect for LEO and MEO SmallSats where wideband spectrum is required to maximize data throughput over brief flyovers. Use it with the Orbital K-Band Space-Based Receiver.

MODEL NUMBER LNBK-EO: SPECIFICATIONS

RF Frequency Band	25.5 to 27.0 GHz
IF Frequency Band	4 to 4.5 GHz
Bandwidth	500 MHz bands
Local Oscillator	Customizable to Frequency Band required - External Reference
Noise Figure	2.5 dB
Gain	60 dB ± 2 dB
Max Ripple 10 MHz	± 0.5 dB
In Band Spurs Signal	-65 dBc
Image Rejection	-35 dBc
LO Leakage Input	-60 dBm
LO Leakage Output	-45 dBm
P1dB Output	10 dBm
OIP3	20 dB

MECHANICAL

Weight	485 g
Length	145 mm
Width	44 mm
Height	44 mm
Input Connector	WR-34
Output Connector	SMA Connector

For more information to order or a full technical report, please contact us at sales@orbitalresearch.net