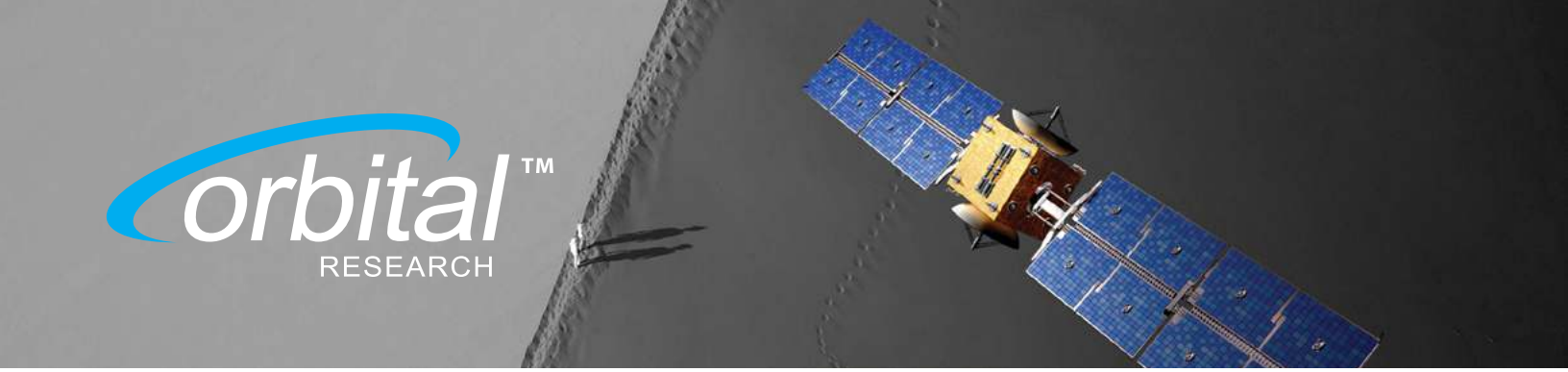

X-Band Earth Observation LNB

Maximize downlink throughput for your X-band earth observation (EO) satellites – even during short flyover times – with the Orbital X-Band EO Low Noise Block Downconverter (LNB).

This powerful LNB supports applications that transmit large volumes of earth observation data over the X-band frequency, such as high-resolution satellite imagery. Take advantage of its low noise figure to minimize the size of your receiving terminal – while maintaining your antenna gain-to-noise temperature (G/T) specifications.

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

The Orbital X-Band EO LNB is built for remote sensing, optical imaging and radar imaging satellites. It is ideally suited to LEO and MEO SmallSats with regulatory access to X-band spectrum.

MODEL NUMBER LNBX-EO: SPECIFICATIONS	
RF Frequency Band	7.75 to 8.5 GHz
IF Frequency Band	950 - 1700 GHz
Bandwidth	750 MHz Band
Local Oscillator	6.8 GHz External Reference
Noise Figure	0.8 dB
Gain	60 dB ± 2 dB
Max Ripple 10 MHz	± 0.5 dB
In Band Spurs Signal	-40 dBc
Image Rejection	-35 dBc
LO Leakage Input	-45 dBm
LO Leakage Output	-35 dBm
P1DB Output	15 dBm
OIP3	25 dBm

POWER[1]	
DC Input Voltage Range	+12 to +28 VDC
DC Current	3.8 Watts

MECHANICAL	
Weight	750 g
Length	145 mm
Width	70 mm
Height	55 mm
Input Connector	WR-112
Output Connector	N Connector

VSWR	
Input	1.5 : 1
Output	2.0 : 1

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

[1] Power supplies must meet 100 mV maximum ripple and noise