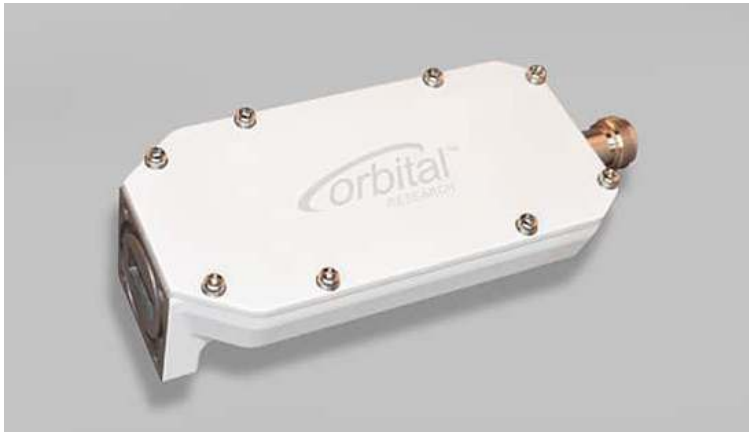
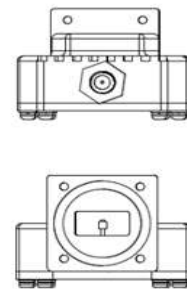
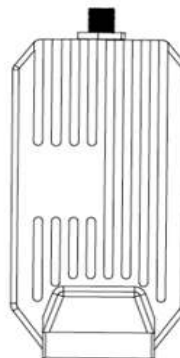
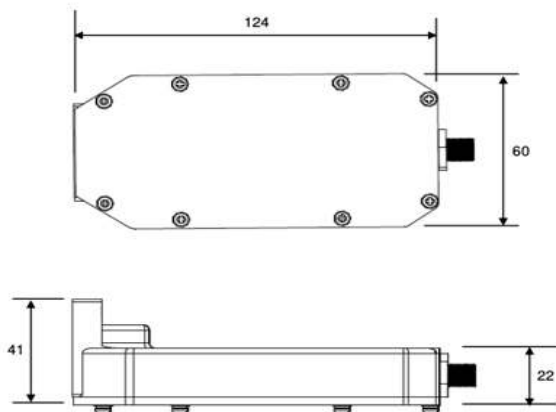




Orbital 5300 Off-the-Shelf Ku-Band PLL LNB



The Orbital 5300 Ku-Band Phase Locked Loop (PLL) LNB is built for applications that require high performance but not the ultra-low phase noise provided by an external 10 MHz reference. This economical, off-the-shelf LNB offers 60 dB gain, 500 to 750 MHz bandwidth, and frequency ranges from 10.95 GHz to 12.75 GHz. It's perfect for applications with less demanding phase noise requirements – such as consumer video, broadband, or DVB-S2 and DVB-S2X waveforms.



RoHS & REACH Compliant

FREQUENCY RANGE

| | |
|-------------------------|--------------------------------------|
| RF Frequency Band (GHz) | 10.95 to 12.75 |
| IF Frequency Band (MHz) | 950 to 1700 |
| Bandwidth (MHz) | 500 or 750 |
| Local Oscillator (GHz) | 10.00, 10.75, 11.30 |
| Noise Figure (dB) | 0.7 nominal, 0.8 for wideband (1GHz) |
| LO Stability | +/- 10 kHz over temp |
| LO Phase Noise | -80 dBc @ 1 kHz |

VSWR

| | |
|--------|---------------|
| Input | 2.2:1 nominal |
| Output | 1.5:1 nominal |

GAIN

| | |
|-----------|----------------------------|
| Gain (dB) | 60 nominal |
| Flatness | +/- 1.5 dB over the band |
| Ripple | +/- 1.0 dB over any 36 MHz |
| Stability | +/- 2 dB over temp & freq |

OTHER SPECS

| | |
|------------------------|-----|
| 1 dB Compression (dBm) | +10 |
| OIP3 (dBm) | +20 |

ENVIRONMENTAL

| | |
|----------------|-----------------|
| Operating Temp | -40 to +60 C |
| Humidity | 100% condensing |
| MTBF | > 175,000 hours |
| Standards | RoHS and REACH |

POWER¹

| | |
|---------------------|----------------|
| Current Draw | 200 mA |
| Input Voltage Range | +12 to +24 VDC |

MECHANICAL

| | |
|------------------|-------|
| Weight (grams) | 350 |
| Length (mm) | 125 |
| Width (mm) | 60 |
| Depth (mm) | 41 |
| Input Connector | WR-75 |
| Output Connector | F, N |

OPTIONS

Gain modifications, 40 and 50 dB
Custom LO's available

Please contact Orbital Research for ordering information: sales@orbitalresearch.net

¹ Power supplies must meet 100 mV maximum ripple and noise