

C-Band LNB Downconverter

This C-Band Low Noise Block downconverter (LNB) is designed for satellite communication systems. It receives signals in the 3.7-4.2 GHz frequency range and converts them to a lower intermediate frequency band of 950-1450 MHz.



Overview

C-Band One Cable Solution LNB

The GCF-D01M is a high-performance C-Band Low Noise Block (LNB) downconverter engineered for reliable satellite communication systems. Featuring a one-cable solution, this unit simplifies installation processes and reduces cabling complexity for professional setups. It provides stable frequency conversion with low noise figures and high gain, ensuring consistent signal quality across both low and high bands.

Frequency Performance

Key Frequency Metrics

5.15 GHz

Low Band LO Frequency

5.75 GHz

High Band LO Frequency

60 dB

Min Conversion Gain

Frequency Range Details

Band	Input Freq (GHz)	Output Freq (MHz)
Low Band	3.7 - 4.2	950 - 1450
High Band	3.7 - 4.2	1550 - 2050

Signal Quality

LO Phase Noise

- 55 dBc/Hz @ 1K Hz
- 75 dBc/Hz @ 10K Hz
- 90 dBc/Hz @ 100K Hz

Max Noise Figure

1.1 dB

Electrical & Physical

Power Input	11 - 20V / 150mA (max)
Output Impedance	75 Ohm (F-Type)
Operating Temperature	-25 to +60 °C
Gain Flatness	± 4 dB