

Low Noise Block (LNB) Ku-Band Dual Band



◆ Company Overview

RevGo designs and manufactures satellite earth station RF from low to medium power. RevGo was founded in 2002 with its headquarters in the Washington DC corridor. RevGo's broad VSAT product line is produced to stringent quality standards using an ISO9001:2015 quality system:

- Block upconverter (BUC)
- Low noise block (LNB)
- Transceiver (Tx/Rx/OMT/filters)
- C-, Ku-, DBS-, Ka-bands
- 2 to 300W output power

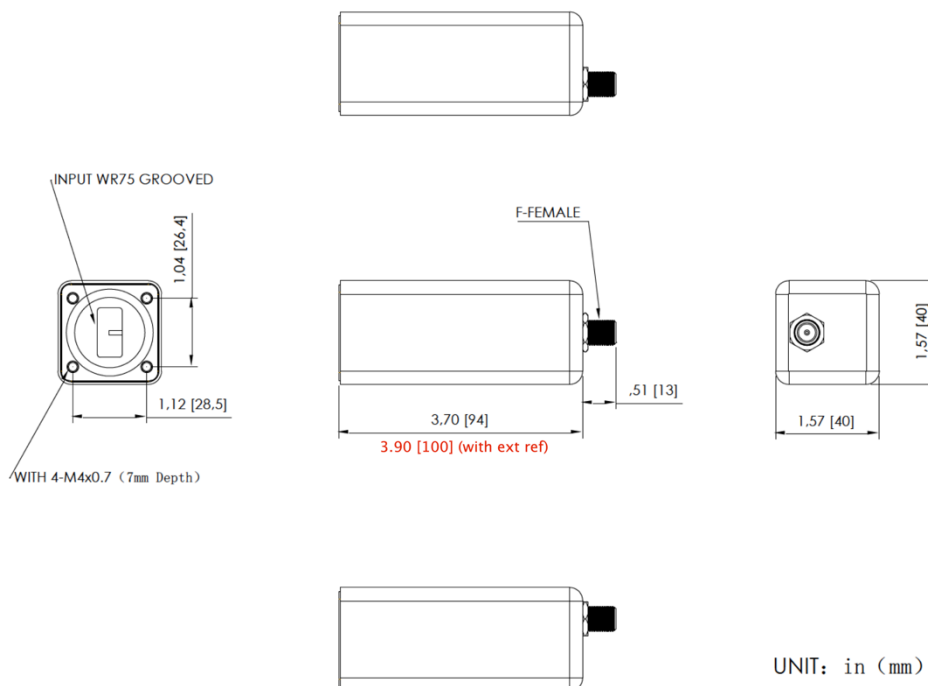
◆ Reliability

- Highly integrated RF technologies (RFIC and GaN)
- Designed for high volume production
- Strict quality control processes resulting in <0.25% field failure rates

◆ Product Features

- Noise Figure options, 0.8 dB
- Single-, and dual-band options
- Internal reference , PLL design, LO Stability ± 3 ppm
- External reference option
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +60°C)

◆ Mechanical Diagram (Unit: inch (mm))



◆ Typical VSAT Applications

- Maritime
- 5G Backhaul
- SNG Vehicle
- Terminals
 - Fixed
 - Portable
 - Transportable

Low Noise Block (LNB)

Ku-Band Dual Band



SPECIFICATIONS

◆ RF Specifications

IF Frequency	
- Single-band	1: 10.95-11.7 2: 11.7-12.2 GHz 3: 12.25-12.75 GHz
- Dual-band	4: 10.7-11.7 GHz & 11.7-12.75 GHz * dual band switched by input volt.
Output Frequency	A: 950-1700/1450 MHz B: 950-1950 & 1100-2150 MHz * dual band switched by input volt.
Noise Figure	0.8 dB or 1.0 dB max
LO Stability	+/- 0.5 ppm +/- 3 ppm External reference (option)
LO Leakage Level	
- IF connector	≤ -30 dBm maximum
- RF connector	≤ -60 dBm maximum
Conversion Gain	50-60 dB or 55-65 dB
Output P1dB	10 dBm minimum
Phase Noise	-65 dBc/Hz max @ 100 Hz -75 dBc/Hz max @ 1 KHz -85 dBc/Hz max @ 10 KHz -95 dBc/Hz max @ 100 KHz
Image Rejection	
Output Spurious	-55 dBc @ -10 dBm (IF output)

◆ Power Supply

Input Power	via IFL connector
- Single-band	12-24 VDC
- Dual-band	12-14 VDC; L-band 16-24 VDC; H-band
Power Consumption	3W (4W using ext ref)

◆ Interfaces

Input Connector	WR75-G (Grooved)
IF Input VSWR	2.5:1
Pwr/Output Connector	F- or N-Type Female
Output VSWR	2.0:1

◆ Physical Parameters

Dimensions

Int. ref :	95x40x40 mm
Ext ref:	100x40x40 mm

Weight

Int ref	0.55lbs / 240gr.
Ext ref.	250gr.

Operating Temperature	-40 to +60°C
Humidity	0-100% (condensing)
Altitude	0-40,000 feet ASL
Water-proof Class	IP 65

◆ Part Number / Ordering Information

R G L N - U a b c d - B e

U: Ku-band

a: Input Frequency

1: 10.95-11.7
2: 11.7-12.2 GHz
3: 12.25-12.75 GHz
4: 10.7-11.7 GHz & 11.7-12.75 GHz

d: Power & Output Connector

F: F-Type (75 Ohm)
N: N-Type (50 Ohm)

b: Output Frequency

A: 950-1700/1450 MHz
T: 950-1950 & 1100-2150 MHz

e: LNB Version

0: Gain 60 dB, NF 1dB max
1: Gain 55 dB, NF 1 dB max
2: Gain 60 dB, NF 0.8 dB max
3: Gain 55 dB, NF 0.8 dB max

c c: Reference Stability

P5: +/- 0.8 ppm
O3: +/- 3 ppm
EX: External reference