

Low Noise Block (LNB)

Ka-Band Mini



◆ Company Overview

RevGo designs and manufactures satellite earth station RF from low to high 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 up converter (BUC)
- Low noise block (LNB)
- Transceiver (Tx/Rx/OMT/filters)
- C-, Ku-, DBS-, Ka-bands
- 3 to 1000W output power



◆ Reliability

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

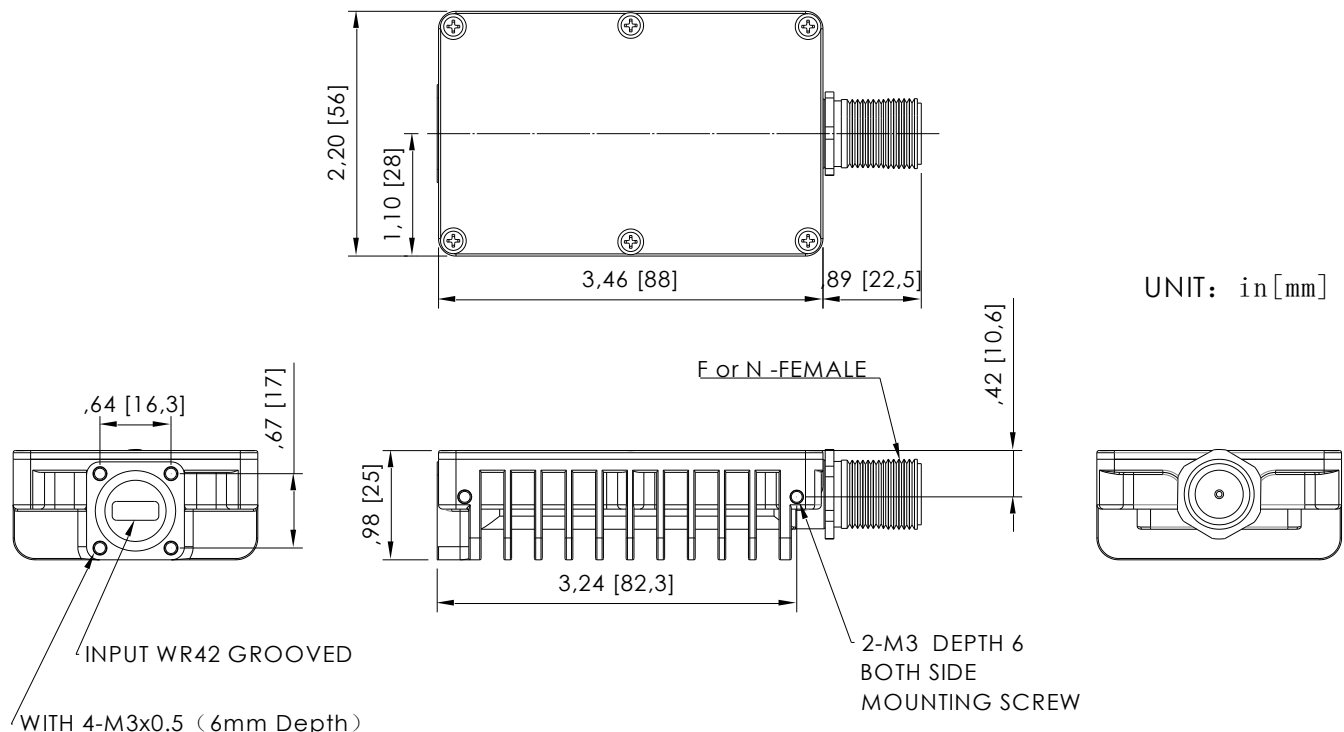
◆ Product Features

- Single-, and dual-band options (from 17.8 to 21.2 GHz)
- High LO stability (PLL design, ± 1 ppm)
- External reference optional
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +60°C)

◆ Typical Applications

- Maritime
- SNG vehicle
- Terminals
 - Fixed
 - Portable
 - Transportable

◆ Mechanical Diagram (Unit: inch [mm])



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SPECIFICATIONS

RF Specifications

Input Frequency

Single-band

LO: 17.25 GHz	2: 18.20-19.20 GHz
LO: 18.25 GHz	3: 19.20-20.20 GHz
LO: 19.25 GHz	4: 20.20-21.20 GHz

Dual-band

LO: 17.25/18.25 GHz	6: 18.20-19.20 & 19.20-20.20 GHz
LO: 18.25/19.25 GHz	7: 19.20-20.20 & 20.20-21.20 GHz
LO: 16.85/18.05 GHz	8: 17.80-19.00 & 19.00-20.20 GHz

Output Frequency 950-1950 MHz

Noise Figure 1.5 dB (RF at band 2, 3, 6, 8)
1.6 dB (RF at band 4, 7)

LO Stability Internal reference (+/- 1 ppm)
External reference (optional)

LO Leakage Level

- IF connector -40 dBm
- RF connector -60 dBm

Conversion Gain 55 to 65 dB

Output P₁ 10 dBm min., 15 dBm typ.

Phase Noise -73 dBc/Hz @ 1 KHz
-83 dBc/Hz @ 10 KHz
-93 dBc/Hz @ 100 KHz

Image Rejection 30 dBc min.

Output Spurious -50 dBc max.

Power Supply

Input Power	Via IFL connector
- Single-band	12-24 VDC
- Dual-band	12-15 VDC, L-band (+13 VDC) 16-24 VDC, H-band(+18 VDC)
Power Consumption	5 W

Interfaces

Input Interface	WR42 (Grooved)
RF Input VSWR	2.5:1
Output Interface	N-type or F-type (optional)
IF Output VSWR	2.0:1

Physical Parameters

Size (inches)	3.46*2.20*0.98
(mm)	88*56*25
Weight (lbs)	0.42 (F-type) 0.46 (N-type)
(g)	190 (F-type) 210 (N-type)
Operating Temperature	-40 to +60°C
Humidity	0-100% (condensing)
Altitude	0-10,000 feet ASL
Water-proof Class	IP65

Part Number / Ordering Information

RGLN-AaAbc-B0	
a: Input Frequency	b: Reference Type
2 = 18.2-19.2 GHz	1 = Internal ref. (+/- 1 ppm)
3 = 19.2-20.2 GHz	E = External ref.
4 = 20.2-21.2 GHz	c: Output connector
6 = 18.2-20.2 GHz	N = N-type female
7 = 19.2-21.2 GHz	F = F-type female
8 = 17.8-20.2 GHz	

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