

Low Noise Block (LNB)

Ka-Band FB



◆ 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 rate

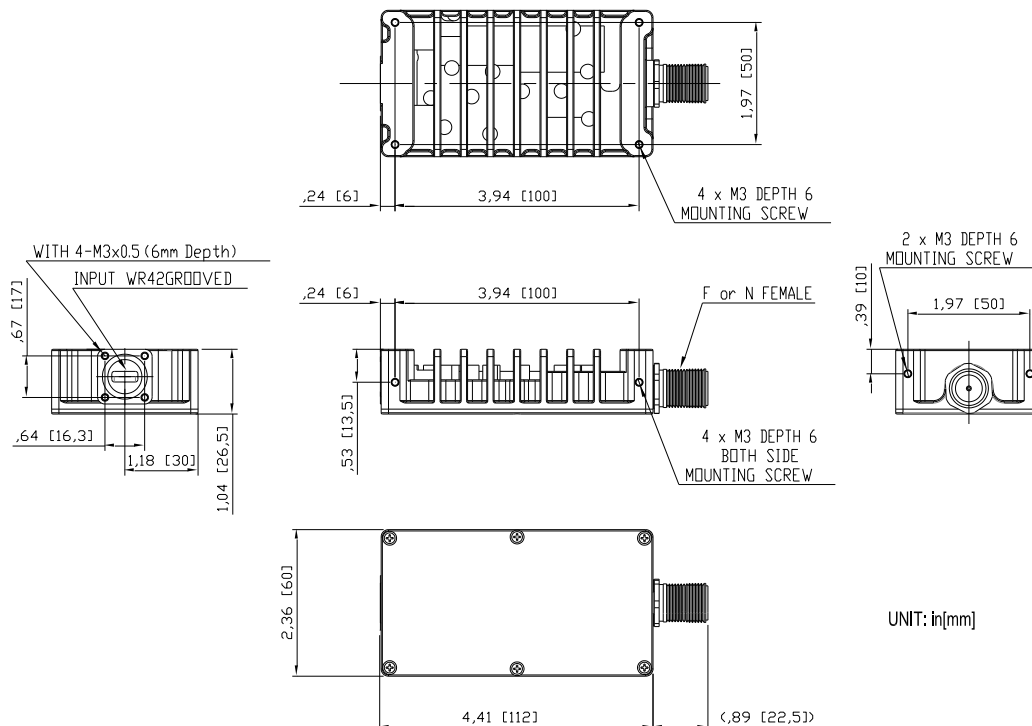
◆ Product Features

- Tri-, and quad-band options (17.7-21.2 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

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

◆ Mechanical Diagram (Unit: inch [mm])



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SPECIFICATIONS

◆ RF Specifications

Input Frequency	
Tri-band	
LO: 16.75 GHz	Band 1: 17.70-18.70 GHz
LO: 17.50 GHz	Band 2: 18.45-19.45 GHz
LO: 18.25 GHz	Band 3: 19.20-20.20 GHz
Quad-band	
LO: 16.75 GHz	Band 1: 17.70-18.70 GHz
LO: 17.50 GHz	Band 2: 18.45-19.45 GHz
LO: 18.25 GHz	Band 3: 19.20-20.20 GHz
LO: 19.25 GHz	Band 4: 20.20-21.20 GHz
Output Frequency	950-1950 MHz
Noise Figure	1.5 dB (RF at band 1, 2, 3) 1.6 dB (RF at band 4)
LO Stability	Internal reference (+/- 1 ppm) External reference (optional)
LO Leakage Level	
- IF connector	-40 dBm max.
- RF connector	-60 dBm max.
Conversion Gain	55 to 65 dB
Output P-1dB	10 dBm min.
Phase Noise	-75 dBc/Hz @1 KHz -85 dBc/Hz @10 KHz -95 dBc/Hz @100 KHz
Image Rejection	40 dB @16.75 GHz, 20 dB @19.25 GHz
Output Spurious	-50 dBc max.

◆ Power Supply

Input Power	12-24 VDC via IFL
Band Switched	
Band 1:	12-15 VDC & no Tone
Band 2:	16-24 VDC & no Tone
Band 3:	16-24 VDC & 22KHz Tone
Band 4:	12-15 VDC & 22KHz Tone
Power Consumption	5 W

◆ Interfaces

Input Interface	WR42 (Grooved)
Input VSWR	2.0:1
Output Interface	N-type female
Output VSWR	2.0:1

◆ Physical Parameters

Size (inches)	4.41*2.36*1.04
(mm)	120*60*26
Weight (lbs)	0.66
(kg)	0.3
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-AaCbbN-C0

a: Input Frequency	c: IF Interface
T = 17.70-20.20 GHz (Tri-band)	N = N-type female
Q = 17.70-21.20 GHz (Quad-band)	F = F-type female
bb: Reference Type	
01 = Internal ref.(+/- 1 ppm)	
EX = External ref.	

◆ Contact Information

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