

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

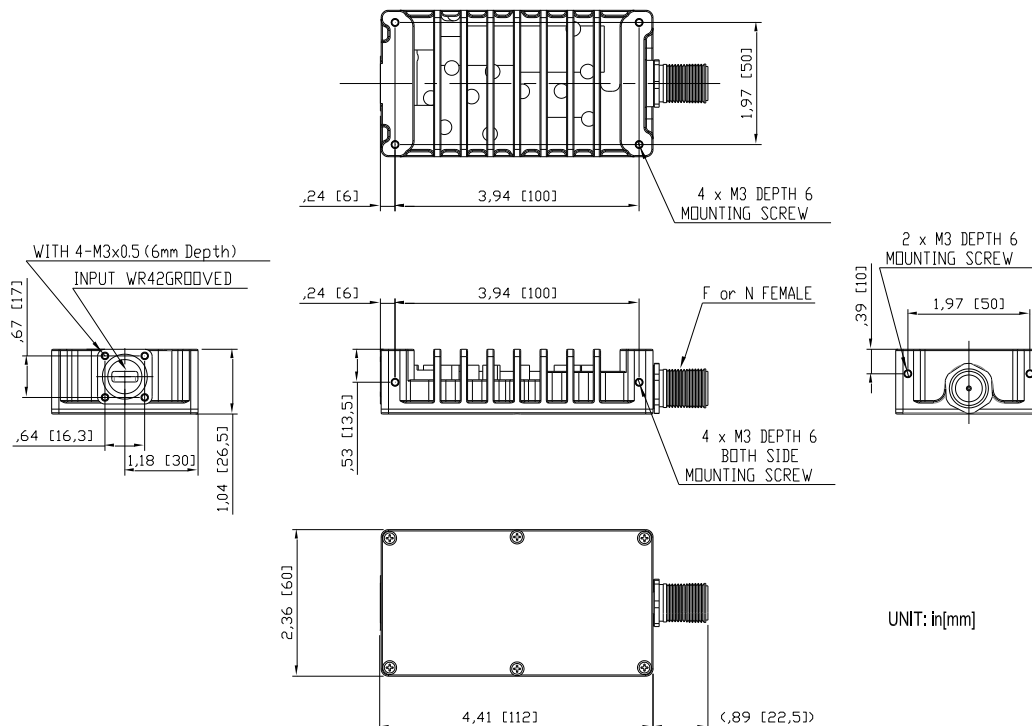
◆ Product Features

- 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. 15 dBm typ.

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-AaC**bb**N-C0

a: Input Frequency

T = 17.70-20.20 GHz (Tri-band)

Q = 17.70-21.20 GHz (Quad-band)

bb: Reference Type

01 = Internal ref. (+/- 1 ppm)

EX = External ref.

◆ Contact Information

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