Block Up-Converter (BUC)
Ka-Band 20W

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 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
- Linearity optimized for high order modulation and high data rate
- Strict quality control processes resulting in <0.25% field failure rates

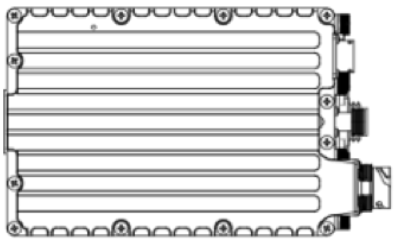
Product Features

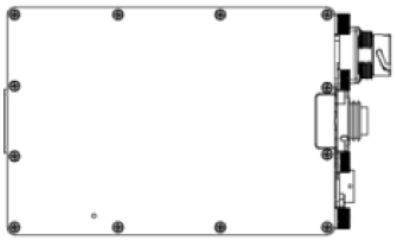
- Variable power consumption 150 W (@43dBm)
  125 W (@40dBm)
- Software selectable sub-band (single-,dual- and tri- band options)
- Compact and light weight (8.8 lbs / 4.0 kg)
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +60ºC)
- M&C with real-time clock, event log, web interface, SNMP, and O-BMIP

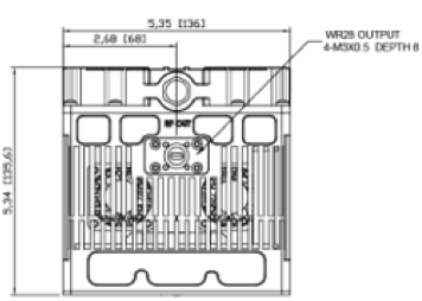
Typical VSAT Applications

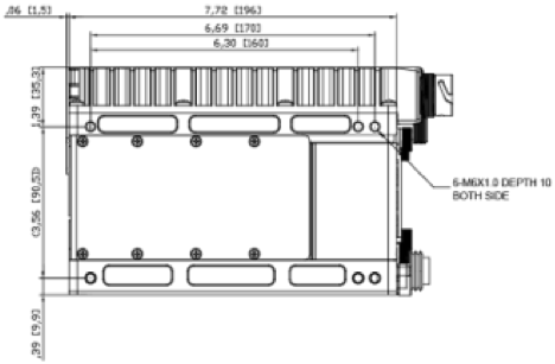
- Maritime
- 5G Backhaul
- SNG Vehicle
- Terminals
  - Fixed
  - Portable
  - Transportable

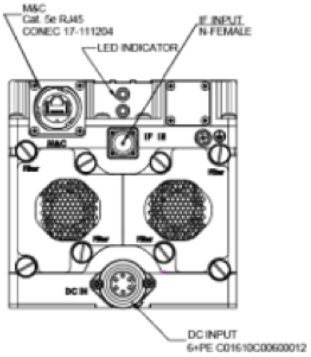
Mechanical Diagram (Unit: inch (mm))











Specifications subject to change without notice.

Block Up-Converter (BUC)
Ka-Band 20W

RevGo

SPECIFICATIONS

RF Specifications

RF Frequency	27.5 -31 GHz (Available in many band options)
IF Frequency	950-1950 MHz 950-1450 MHz 1000-2000 MHz
External Ref	10 MHz, 0 ± 5 dBm
Output Power	
Rated/PSat	43 dBm
PLin[1]	42 dBm
PLin[2]	41 dBm
PLin[3]	40 dBm
IMD3 (3dB from rated)	-25 dBc
Small Signal Gain	70 dB
Gain Variation	1 dB p-p / 36 MHz 3 dB p-p / 500 MHz 4 dB p-p / 1000 MHz
Gain stability	3 dB p-p
Gain Adjustment	20 dB (Step: 0.1 dB)
Phase Noise	-63 dBc / Hz @ 100 Hz -73 dBc / Hz @ 1 KHz -83 dBc / Hz @ 10 KHz -93 dBc / Hz @ 100 KHz
Output Spurious	-55 dBc

Notes:
PLin[1]: -26 dBc regrowth, 1.5 SR (commercial satellite)
PLin[2]: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one-carrier)
PLin[3]: <-25 dBc IMD3 (MIL-STD-188-164B, two-carrier)

Power Supply

Input Power	+36 to +56 vDC
Power Consumption	
@ PLin[3] Output	125W
@ Rated Output	150W

Interfaces

RF Output Connector	WR28-G (Grooved)
RF Output VSWR	1.25:1
IF Connector	N-Type Female
IF Input VSWR	1.5:1
Power Connector	C01610C00600012
M&C Connector	Ethernet RJ45
Alarm Status Indicator	LED (green/red)

Physical Parameters

Size	(inches)	7.7*5.4*5.4
	(mm)	196*136*136
Weight	(lbs)	8.8 lbs
	(kg)	4.0 kg
Operating Temperature		-40 to +60°C
Humidity		0-100% (condensing)
Altitude		0-10,000 feet ASL

Part Number / Ordering Information

RGUC – A **a** 20 – DC **b b** - M	
A: Frequency Band **A** = Ka-Band	**7** = 27.5-30 GHz **8** = 28-30 GHz **9** = 28.2-29 GHz **0** = 27.5-29 GHz **T** = 27.5-30 GHz
a: Frequency Range **1** = 29-30 GHz **2** = 29.5-30 GHz **3** = 30-31 GHz **4** = 29-30 & 30-31 GHz **5** = 27.652-28.388 GHz **6** = 28.172-29.071 GHz	**bb = M&C Interface** **RE** = RJ45 **XX** = RJ45 & RS485/232

Request A Quote