

Block Up-Converter (BUC)

C-Band 5 / 8W



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



◆ Product Features

- Low power consumption 40W (@ 37 dBm) 50W (@ 39 dBm)
- Compact and light weight (3.3lbs / 1.5kg)
- Fanless
- IFL input power
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +60°C)

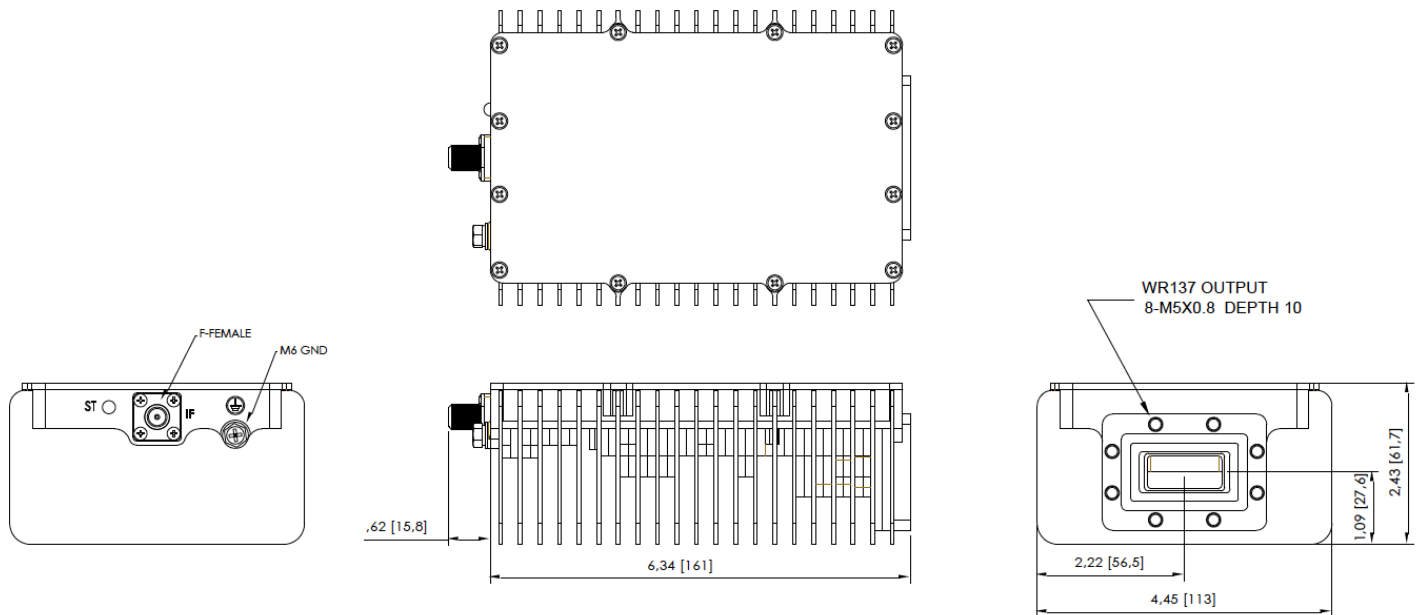
5W BUC

8W BUC

◆ Typical VSAT Applications

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

◆ Mechanical Diagram (unit: inch [mm])



Block Up-Converter (BUC)

C-Band 5 / 8W



SPECIFICATIONS

RF Specifications

RF Frequency	<u>Standard</u>	<u>Extended</u>
	5.850-6.425 GHz	5.850-6.725 GHz
IF Frequency	950-1525 MHz	950-1825 MHz
External Ref	10 MHz, 0 ± 5 dBm	
Output Power	<u>5W BUC</u>	<u>8W BUC</u>
Saturated	37 dBm	39 dBm
Plin ¹	36 dBm	38 dBm
Plin ²	35 dBm	37 dBm
Plin	34 dBm	36 dBm
ACPR (3dB back off rated)	- 26 dBc	
Small Signal Gain	60 dB	
Gain Variation	1 dB p-p / 36 MHz	
	4 dB p-p / 575 MHz	
	5 dB p-p / 875 MHz	
Gain stability	4 dB p-p	
RX noise density	-87 dBm/4 KHz @ 3.4-4.8 GHz	
Phase Noise	-65 dBc / Hz @ 100 KHz	
	-75 dBc / Hz @ 1 KHz	
	-85 dBc / Hz @ 10 KHz	
	-95 dBc / Hz @ 100 KHz	
Output Spurious	-55 dBc	

Notes:

- Plin¹: -26 dBc regrowth, 1.5 SR (commercial satellite)
- Plin²: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one-carrier)
- Plin <-25 dBc IMD3 (MIL-STD-188-164B, two-carrier)

Power Supply

Input Power	+18 to +36 vDC via IFL	
Power Consumption	<u>5W BUC</u>	<u>8W BUC</u>
@ Rated Output	40W	50W

Interfaces

RF Output Connector	WR137-G (Grooved)	
IF Connector	F-Type Female	
RF Output VSWR	2:1	
IF Output VSWR	2:1	
Power/M&C Connector	IFL (no M&C)	
Alarm Status Indicator	Green	Red
LED*1	Normal	PLL alarm

Physical Parameters

Size (inches)	6.9*4.5*2.5	
(mm)	177*113*62	
Weight (lbs)	3.3	
(kg)	1.5	
Operating Temperature	-40 to +60°C	
Humidity	0-100% (condensing)	
Altitude	0-10,000 feet ASL	

Part Number / Ordering Information

RGUC-C abbb -24NAF-A0	
a: Frequency Range	bbb: Output Power
1 = 5.850-6.425 GHz	005 = 5W
2 = 5.850-6.725 GHz	008 = 8W

Contact Information

Website:	www.revoglobal.com
Telephone:	+1 (703) 348-9933
E-mail:	Sales@RevGoGroup.com
Address:	12007 Sunrise Valley Dr., #450 Reston, VA 20191 USA

