

Block Up-Converter (BUC)

Ku-Band 6/8W Mini



4 ♦ 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
- 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

8W BUC

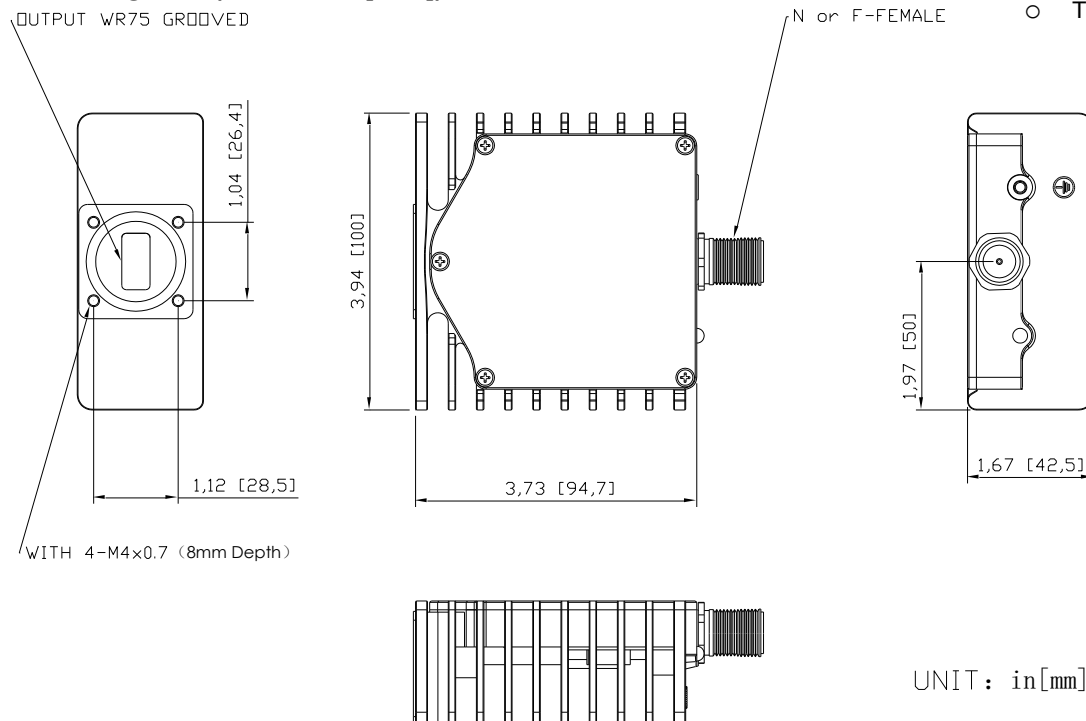
6W BUC

- Ultra-Low power consumption 30W typ. (@39 dBm) 25W typ. (@37.8 dBm)
- Ultra-Compact and light weight 1.14lbs / 520g
- Fanless
- IFL input power
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +60°C)

♦ Typical VSAT Applications

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

♦ Mechanical Diagram (Unit: inch [mm])



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SPECIFICATIONS

RF Specifications

	<u>Standard</u>	<u>Extended</u>
RF Frequency	14.00-14.50 GHz	13.75-14.50 GHz
IF Frequency	950-1450 MHz	950-1700 MHz
External Ref	10 MHz, -10 to +5 dBm	
Output Power	<u>8W BUC</u>	<u>6W BUC</u>
Saturated	39.5 dBm	38.5 dBm
Plin ¹	38 dBm	37.0 dBm
Plin ²	37.0 dBm	36.0 dBm
IMD ³ (3dB back off Prated)	-24 dBc	
Small Signal Gain	63 dB nom.	
Gain Variation	1 dB p-p / 36 MHz	
	4 dB p-p / 500 MHz	
	5 dB p-p / 750 MHz	
Gain stability	4 dB p-p	
Rx Noise Density	-154 dBm/Hz (10.70-12.75 GHz)	
Phase Noise	-60 dBc / Hz @ 100 Hz	
	-75 dBc / Hz @ 1 KHz	
	-85 dBc / Hz @ 10 KHz	
	-95 dBc / Hz @ 100 KHz	
Output Spurious	-50 dBc	

Power Supply

Input Power	+12 to +36 VDC	
Power Consumption	<u>8W BUC</u>	<u>6W BUC</u>
@ Rated Output	30W typ.	25W typ.
@ No IF	12W typ.	10 W typ.

Interfaces

RF Output Connector	WR75-G (Grooved)	
IF Connector	N-Type Female	
	F-Type Female (optional)	
RF Output VSWR	2:1	
Power	Via IFL	
Alarm Status Indicator	Green	Red
LED*1	Normal	PLL alarm

Physical Parameters

Size	(inches)	3.72*3.93*1.67
	(mm)	94.7*100*42.5
Weight	(lbs)	1.14
	(kg)	0.52
Operating Temperature	-40 to +60°C	
Humidity	0-100% (condensing)	
Altitude	0-10,000 feet ASL	

Notes:

Plin¹: -26 dBc regrowth, 1.5 SR (commercial satellite)

Plin²: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one-carrier)

Part Number / Ordering Information

RGUC-Ua <u>00b</u> -24NA <u>c</u> -B0	
<u>a</u> : Frequency Range	<u>c</u> : IF Connector
1 = 14.00-14.50 GHz	N = N-Type Female
2 = 13.75-14.50 GHz	F = F-Type Female
<u>b</u> : Output power	
06 = 6 W	
08 = 8 W	

Contact Information

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

