

Block Up-Converter (BUC)

Ku-Band 6/8W



◆ 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
- 3 to 1000W output power

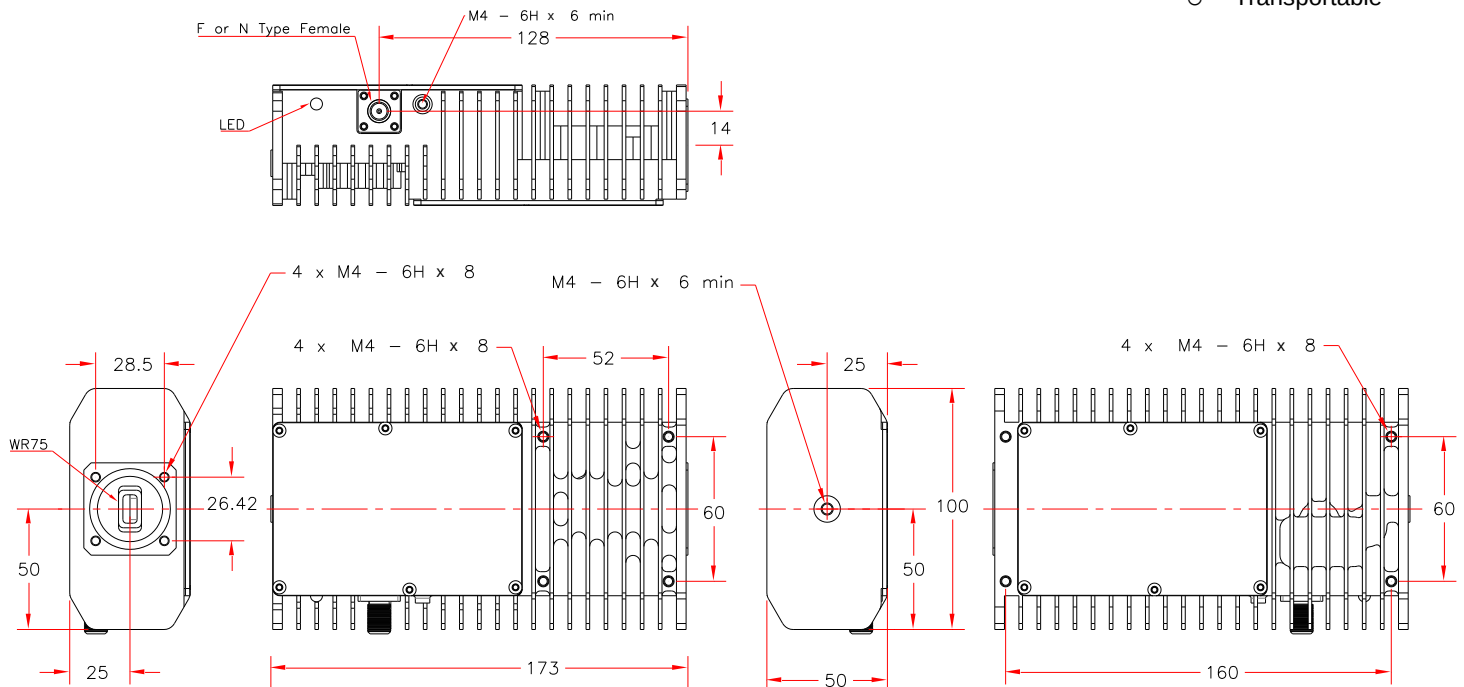
◆ Reliability

- Highly integrated RF technologies (RFIC and GaAs)
- 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

- | | <u>6W BUC</u> | <u>8W BUC</u> |
|--|----------------|---------------|
| • Low power consumption | 48W (@38dBm) | 60W (@39dBm) |
| • Compact and light weight | 2.6lbs / 1.2kg | |
| • Fanless | | |
| • IFL input power | | |
| • Low phase noise (exceeds IESS308/309) | | |
| • Rugged design for extreme environments | | |

◆ Mechanical Diagram (Unit: inch (mm))



◆ Typical VSAT Applications

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

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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, 0 ± 5 dBm	
Output Power	<u>6W BUC</u>	<u>8W BUC</u>
Saturated	37.8 dBm	39 dBm
Plin ¹	36.8 dBm	38 dBm
Plin ²	36 dBm	37 dBm
Plin	35.5 dBm	36 dBm
IMD ₃ (@ Plin)	- 25 dBc	
Small Signal Gain	60 dB	
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	-144 dBm/Hz (10.70-12.75 GHz)	
Phase Noise	-60 dBc / Hz @ 100 Hz	
	-70 dBc / Hz @ 1 KHz	
	-80 dBc / Hz @ 10 KHz	
	-90 dBc / Hz @ 100 KHz	
Output Spurious	-50 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

Power Supply

Input Power	+18 to +36 VDC	
Power Consumption	<u>6W BUC</u>	<u>8W BUC</u>
@ Rated Output	48W	60W

Interfaces

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

Physical Parameters

Size	(inches)	6.8*4.0*2.0
	(mm)	173*100*50
Weight	(lbs)	2.6
	(kg)	1.2
	<u>6W BUC</u>	<u>8W BUC</u>
Operating Temperature	-40 to +60 °C	-40 to +55 °C
Humidity	0-100% (condensing)	
Altitude	0-10,000 feet ASL	
Protection	IP66	

Part Number / Ordering Information

RGUC-U abbb -24NA c -A0	
a: Frequency Range	bb: Output Power
1 = 14.00-14.50 GHz	006 = 6W
2 = 13.75-14.50 GHz	008 = 8W
c: IF Connector	
N = N-Type Female	
F = F-Type Female	

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

