

Block Up-Converter (BUC)

Ka-Band 6/10W



◆ 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 up converter (BUC)
- Low noise block (LNB)
- 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



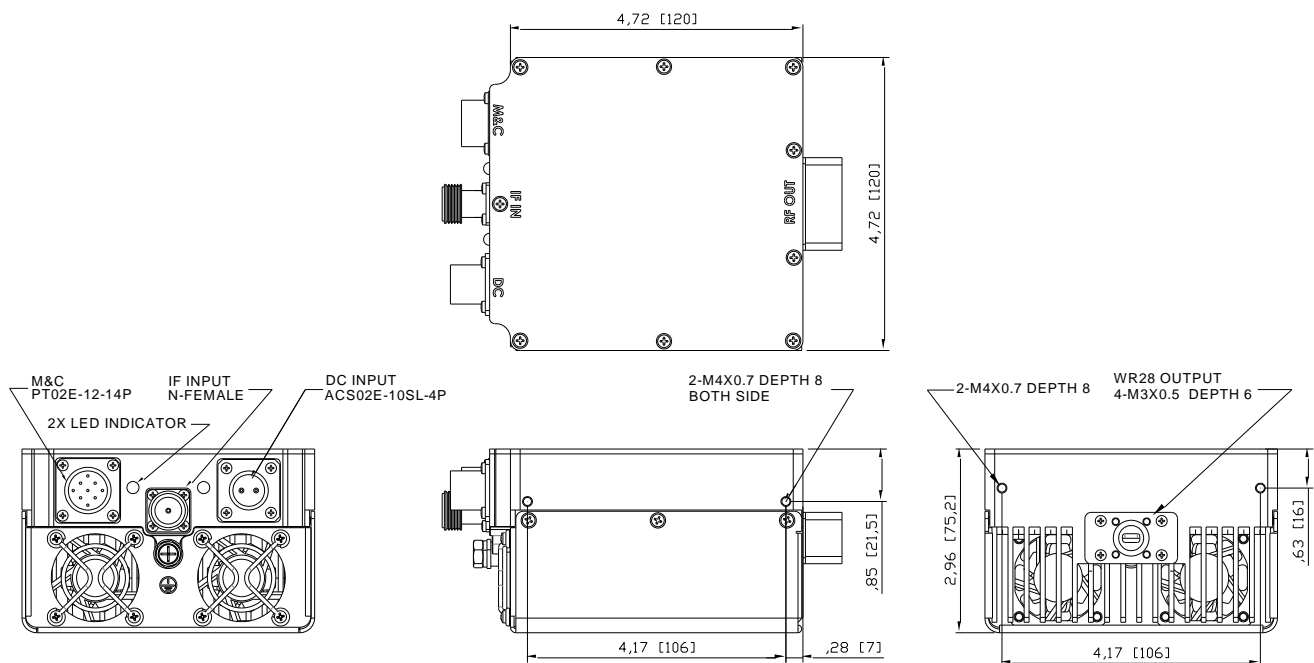
◆ Product Features

- | | <u>6W BUC</u> | <u>10W BUC</u> |
|---|------------------|------------------|
| • High linear output power | 37 dBm | 39 dBm |
| • Variable power consumption | 60 W @38 dBm | 70 W @40 dBm |
| • Compact and light weight | 3.3 lbs / 1.5 kg | 3.3 lbs / 1.5 kg |
| • Single-, dual-, tri-band options (27.5-31GHz) | | |
| • Band selection from remote interface (SNMP) | | |
| • Low phase noise (exceeds IESS308/309) | | |
| • Rugged design for extreme environments (-40 to +60°C) | | |

◆ Typical VSAT Applications

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

◆ Mechanical Diagram (Unit: inch [mm])



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SPECIFICATIONS

◆ RF Specifications

RF Frequency	(Optional)	
LO Freq. @28.05 GHz	29.00-30.00 GHz	
LO Freq. @28.05/29.05 GHz	29.00-31.00 GHz	
LO Freq. @26.55/27.30/28.05 GHz	27.50-30.00 GHz	
IF Frequency	950-1950 MHz	
External Reference	10 MHz, 0±5 dBm	
Output Power (dBm)	6W BUC	10W BUC
Saturated	38 dBm	40 dBm
PLin¹	37 dBm	39 dBm
PLin²	36 dBm	38 dBm
PLin	35 dBm	37 dBm
IMD3 (@Prated-3dB)	-25 dBc	
Small Signal Gain	65 dB	
Gain Variation	1 dB p-p/36MHz	
	3 dB p-p/500MHz	
	4 dB p-p/1000MHz	
Gain stability	3 dB p-p	
Gain Adjustment Range	20 dB (45 - 65 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:

- PLin¹**: -26 dBc regrowth, 1.5 SR (commercial satellite)
- PLin²**: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one-carrier)
- PLin³**: <-25 dBc IMD3 (MIL-STD-188-164B, two-carrier)

◆ Power Supply

Input Power	+18 to +55 VDC	
Power Consumption	6W BUC	10W BUC
@ PLin Output	45 W	55 W
@ Rated Output	60 W	70 W

◆ Interfaces

RF Output Connector	WR28-G (Grooved)		
RF Output VSWR	1:3:1		
IF Input Connector	N-Type		
IF Input VSWR	2:1		
Power Connector	ACS02E10SL-4P		
M&C Connector	PT02E-12-14P		
	RS485, RS232 & Ethernet		
LED Alarm Indicator	ON	Flash	
(1 LED)	Green	Normal	PLL alarm
	Red	PLL alarm	

◆ Physical Parameters

Size	(inches)	4.7*4.7*3.0
	(mm)	120*120*75
Weight	(lbs)	3.3
	(kg)	1.5
Operating Temperature	-40 to +60 °C	
Humidity	0-100 % (condensing)	
Altitude	0-40,000 feet ASL	

◆ Part Number / Ordering Information

RGUC-A abbb -DCREN-B0	
a: RF Frequency	bbb: Output Power
1 = 29.00 - 30.00 GHz	006 = 6 W
3 = 30.00 - 31.00 GHz	010 = 10 W
4 = 29.00 - 31.00 GHz	
5 = 27.652 - 28.388 GHz	
6 = 28.172- 29.071 GHz	
7 = 27.652 - 29.071 GHz	
T = 27.50 - 30.00 GHz	

◆ Contact Information

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