

Block Up-Converter (BUC)

C-Band 20 / 40W



◆ 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

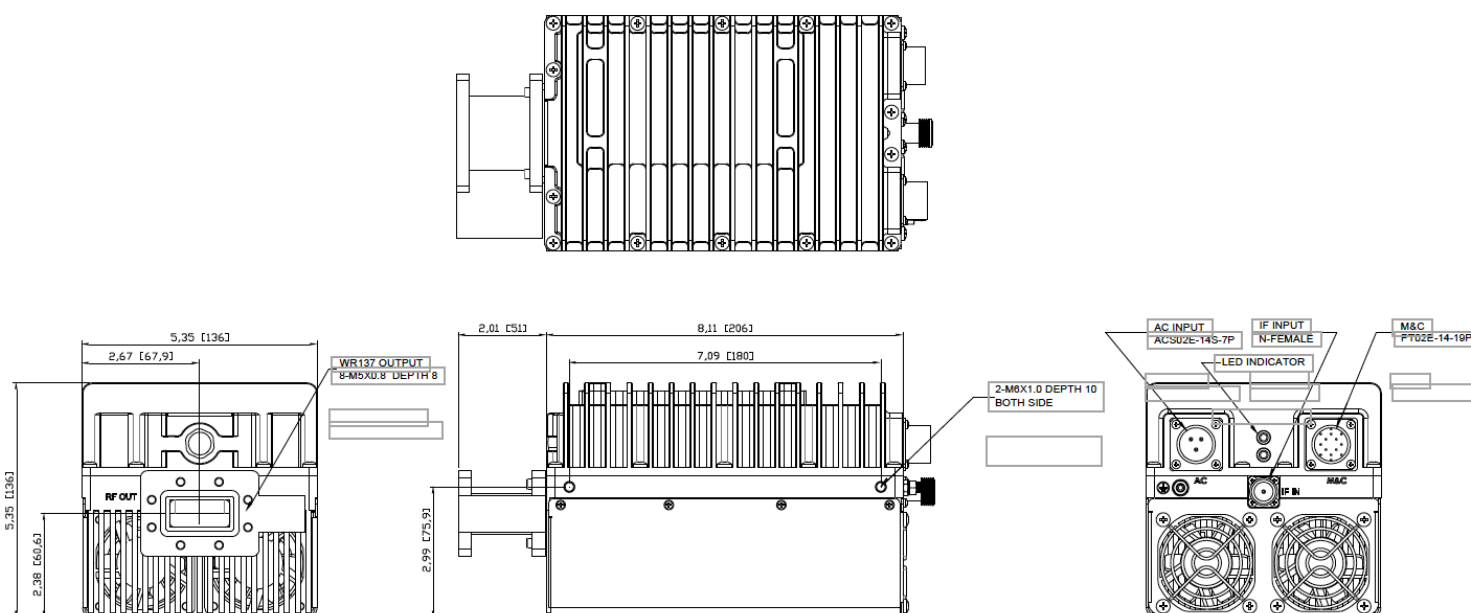
◆ Reliability

- 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

- | | <u>20W</u> | <u>40W</u> |
|---|-------------|-------------|
| • Variable power consumption | 130W @42dBm | 220W @45dBm |
| • Compact and light weight (11 lbs / 5 kg) | | |
| • Low phase noise (exceeds IESS308/309) | | |
| • Rugged design for extreme environments (-40 to +60°C) | | |

◆ 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 Band</u>	<u>Extended Band</u>
RF Frequency	5.850-6.425GHz	5.850-6.725GHz
IF Frequency	950-1525MHz	950-1825MHz
Local Frequency	4900MHz	
External Ref	10MHz, 0±5dBm	
Output Power	<u>20W</u>	<u>40W</u>
Rated/Saturated	43dBm	46dBm
PLin ¹	42dBm	45dBm
PLin ²	41dBm	44dBm
PLin ³	40dBm	43dBm
IMD3 (3dB from rated)	≤ -25dBc	
Small Signal Gain	70dB	
Gain Variation	1dB p-p/36MHz 3dB p-p/575MHz 4dB p-p/875MHz	
Gain stability	± 1.5dB p-p	
Gain Adjustment	20dB (Step: 0.1dB)	
Phase Noise	-65dBc/Hz@100Hz -75dBc/Hz@1KHz -85dBc/Hz@10KHz -95dBc/Hz@100KHz	
Output Spurious	≤ -55dBc	

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	+85 to +265 VAC (47-63Hz)	
Power Consumption	<u>20W</u>	<u>40W</u>
@ PLin ¹ Output	130W	220W
@ Rated Output	160W	250W

◆ Interfaces

RF Output Connector	WR137-G (Grooved)
RF Output VSWR	1.25:1
IF Input Connector	N-Type Female
IF Input VSWR	1.5:1
Power Supply Connector	ACS02E-14S-7P
M&C Connector	PT02E-14-19P RS485, RS232 & Eth
Alarm Status Indicator	Yellow LED = PLL Unlock

◆ Physical Parameters

Size	(inches)	8.11*5.35*5.35
	(mm)	206*136*136
Weight	(lbs)	11
	(kg)	5
Operating Temperature		-40 to +60°C
Humidity		0-100% (condensing)
Altitude		0-40,000 feet ASL

◆ Part Number / Ordering Information

R G U C - C <u>a</u> <u>b</u> b - A C R E - N	
C: C-band	
<u>a</u> : Frequency Bands	<u>bb</u> : Output Power
1 = 5.850-6.425 GHz	20 = 20W
2 = 5.850-6.725 GHz	40 = 40W