

Block Up-Converter (BUC)

C-Band 80/100W



◆ 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 400W output power

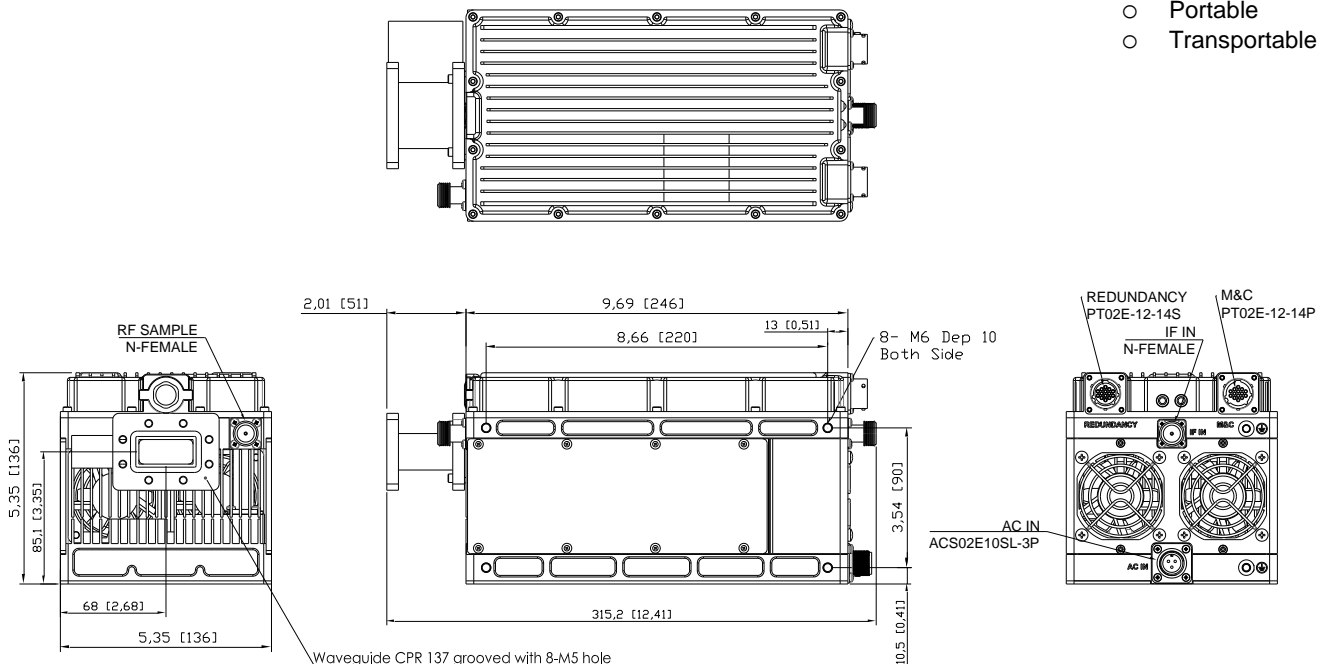
◆ Reliability

- 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

- Wide channel separation capable for multi-carriers and multi-transponders
- Variable power consumption
360 W @ 50dBm 300 W @ 49dBm
290 W @ 47dBm 260 W @ 46dBm
- Integrated equipment failure switching (1:1 redundancy ready)
- Optional equipment redundancy configurations
- 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

Block Up-Converter (BUC)

C-Band 80/100W



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>80W BUC</u>	<u>100W BUC</u>
Rated/Saturated	49 dBm	50 dBm
PLin ¹	48 dBm	49 dBm
PLin ²	47 dBm	48 dBm
PLin	46 dBm	47 dBm
IMD3 @Plin ³	-25 dBc	
Small Signal Gain	75 dB	
Gain Variation	1 dB p-p / 36 MHz	
	3 dB p-p / 575 MHz	
	4 dB p-p / 875 MHz	
Gain stability	3 dB p-p	
Gain Adjustment	20 dB (55-75 dB, Step: 0.1 dB)	
TX noise density	-76 dBm/Hz	
RX noise density	-156 dBm/Hz	
Phase Noise	-65 dBc / Hz @ 100 Hz	
	-75 dBc / Hz @ 1 KHz	
	-85 dBc / Hz @ 10 KHz	
	-95 dBc / Hz @ 100 KHz	
Output Spurious	-60 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	85 to 265 VAC (47-63 Hz)	
Power Consumption	<u>80W BUC</u>	<u>100W BUC</u>
@ PLin Output	260 W	290 W
@ Rated Output	300 W	360 W

Interfaces

RF Output Connector	WR137-G (Grooved)	
RF Output VSWR	1.25:1	
IF Connector	N-Type Female	
IF Input VSWR	1.5:1	
Power Connector	ACS02E10SL-3P	
M&C Connector	PT02E-12-14P	
	SNMPv2	
Redundancy Connector	PT02E-12-14S	
Alarm Status Indicator	Green ON	Red Flash
LED*2	Normal	PLL Alarm

Physical Parameters

Size	(inch)	9.69*5.35*5.35
	(mm)	246*136*136
Weight	(lbs)	13.2
	(kg)	5
Operating Temperature	-40 to +60°C (guarantee)	
Humidity	0-100% (condensing)	
Altitude	0-15,000 feet ASL	

Part Number / Ordering Information

RGUC-C abbb -ACREN-C0	
a: Frequency Range	b: Output Power
1 = 5.850-6.425 GHz	080 = 80 W
2 = 5.850-6.725 GHz	100 = 100W

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	

Block Up-Converter (BUC)

C-Band 80/100W



◆ Optional 1:1 Redundancy Configuration

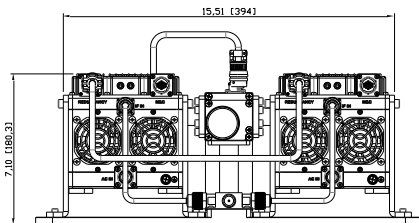
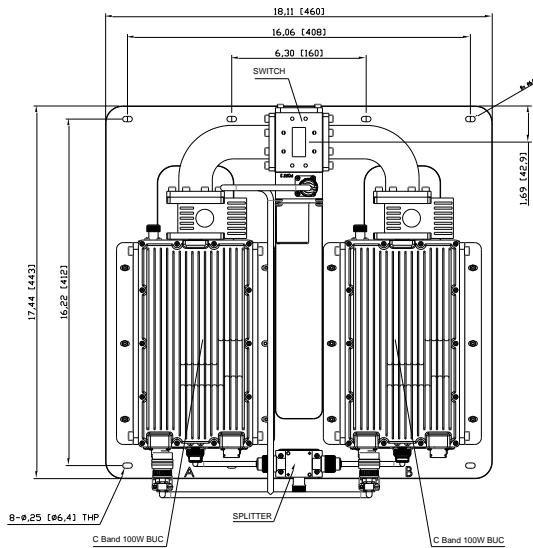
In the event of an equipment failure, the optional 1:1 redundancy kit switches traffic from the primary BUC to the standby BUC.

- Compatibility: 80W & 100W BUCs
- Switching Function: Auto or Manual
- Type of Standby: Cold-backup or Hot-backup
- Rugged design for extreme environments

◆ Items Included in Kit

- WR-137 waveguide switch *1
- WR-137 Hi Power Load *1
- Waveguide *2
- Splitter *1
- Interconnection cabling
- Mounting Frame x1

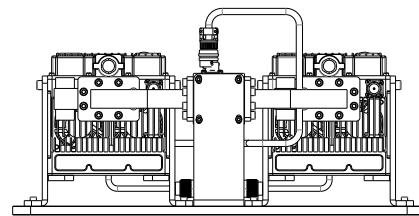
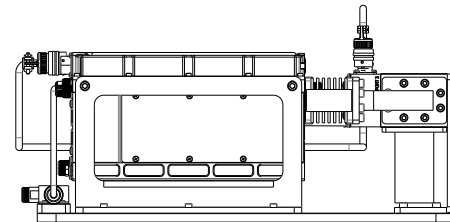
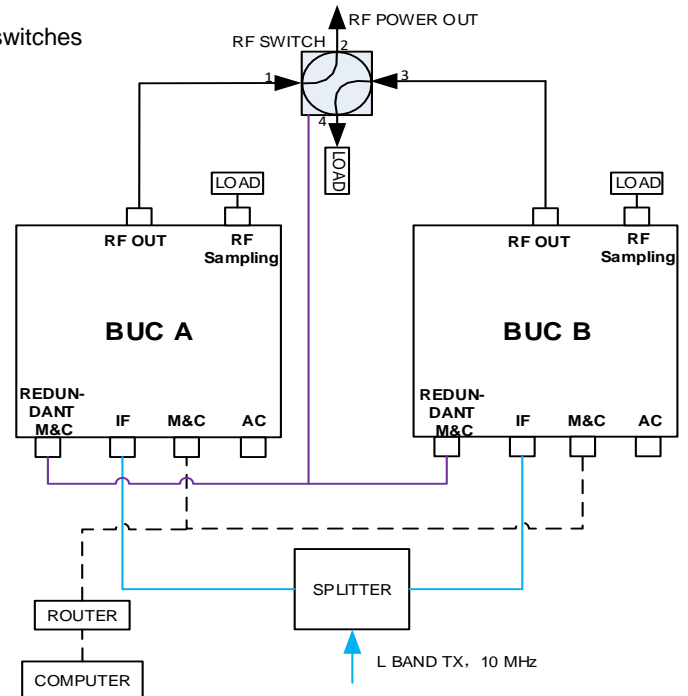
◆ Mechanical Diagram (Unit: inch [mm])



◆ Part Number / Ordering Information

RGXA – CB100RK - A0

Optional 1:1 Redundancy Kit



UNIT: in(mm)

◆ 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

