

Block Up-Converter (BUC)

C-Band 25/40W



◆ 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

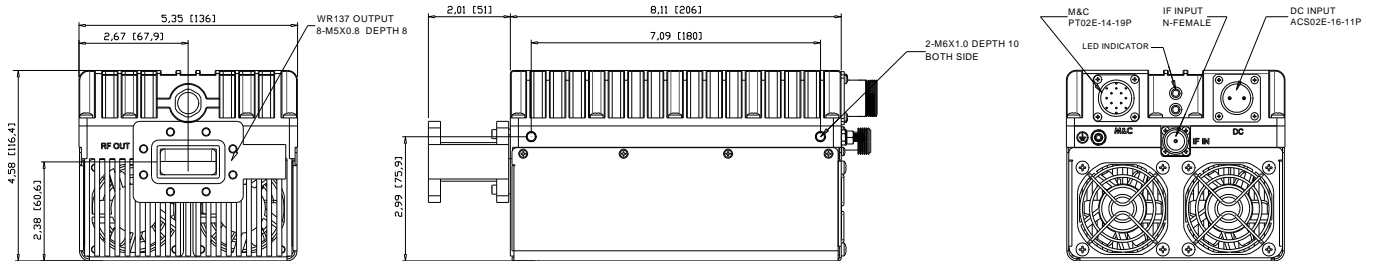
◆ Typical VSAT Applications

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

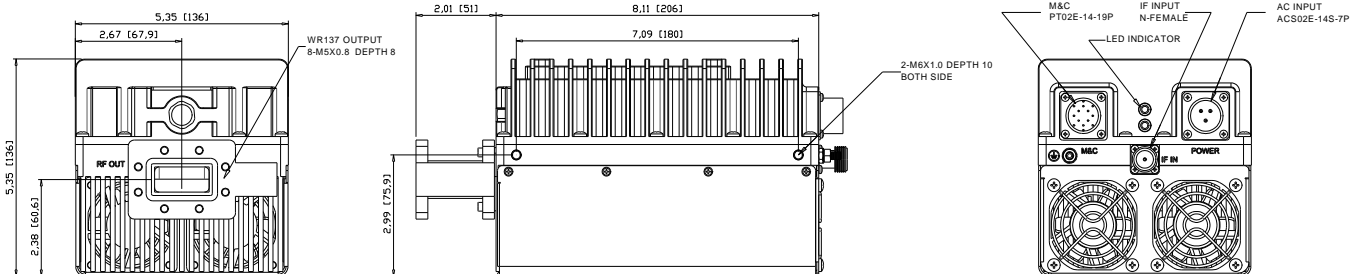
◆ Product Features

	<u>25W BUC</u>	<u>40W BUC</u>
• Variable power consumption	170W @44dBm	210W @46dBm
• Compact and light weight	<u>10.6 lbs/4.8kg@AC</u>	<u>9.7 lbs/4.4kg@DC</u>
• Low phase noise (exceeds IESS308/309)		
• Rugged design for extreme environments (-40 to +60°C)		

◆ Mechanical Diagram (Unit: inch [mm])



DC Version



AC Version

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SPECIFICATIONS

◆ RF Specifications-

	<u>Standard Band</u>	<u>Extended Band</u>
RF Frequency	5.850-6.425 GHz	5.850-6.725 GHz
IF Frequency	950-1525 MHz	950-1825 MHz
Local Frequency	4.9 GHz	4.9 GHz
External Ref	10MHz, 0±5dBm	
Output Power	<u>25W BUC</u>	<u>40W BUC</u>
Rated/Saturated	44dBm	46dBm
PLin ¹	43dBm	45dBm
PLin ²	42dBm	44dBm
PLin	41dBm	43dBm
IMD3 (@Prated-3dB)	≤ -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 (50-70dB, 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)
 PLin : <-25 dBc IMD3

◆ Power Supply

Input Power	
DC Version	+36 ~ +72 VDC (optional)
AC Version	+85 to +265 VAC (47-63Hz)
Power Consumption	
	<u>25W BUC</u> <u>40W BUC</u>
AC Version @ Rated Output	170 W 210 W
DC Version @ Rated Output	160 W 200 W

◆ Interfaces

RF Output Connector	WR137(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	
Alarm Status Indicator	LED(Yellow)	LED(Red)
	Normal	OFF OFF
	PLL Alarm	OFF ON

◆ Physical Parameters

		DC version	AC version
Size	(inches)	10.1*5.3*4.5	10.1*5.3*5.3
	(mm)	257*136*116	257*136*136
Weight	(lbs)	9.7	10.6
	(kg)	4.4	4.8
Operating Temperature		-40 to +60°C	
Humidity		0-100% (condensing)	

◆ Part Number / Ordering Information

RGUC-Ca040-bbREN-A0	
a: Frequency Bands	bb: Power Supply
1 = 5.850-6.425 GHz	48 = +36 ~ +72 VDC
2 = 5.850-6.725 GHz	AC = +85 to +265 VAC

◆ 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	

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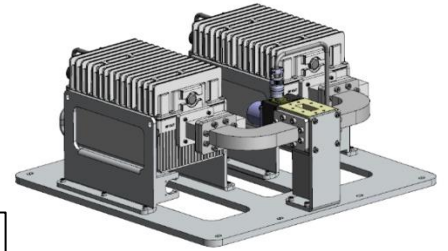
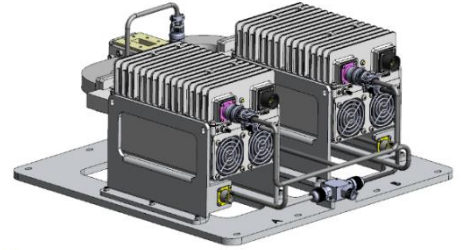
C-Band 25/40W



Optional 1:1 Redundancy Configuration

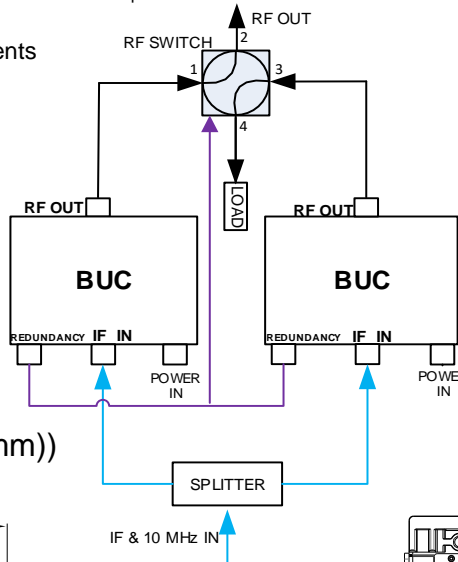
In the event of an equipment failure, the optional 1:1 redundancy kit switches traffic from the primary BUC to the standby BUC.

- Compatibility: 25/40W BUC
- Switching Function: Auto or Manual
- Type of Standby: Cold-backup or Hot-backup
- Rugged design for extreme environments

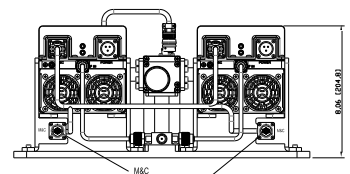
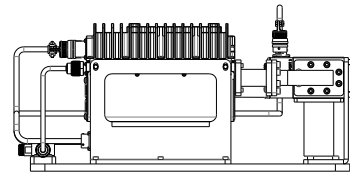
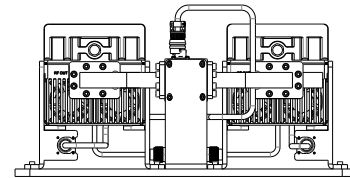
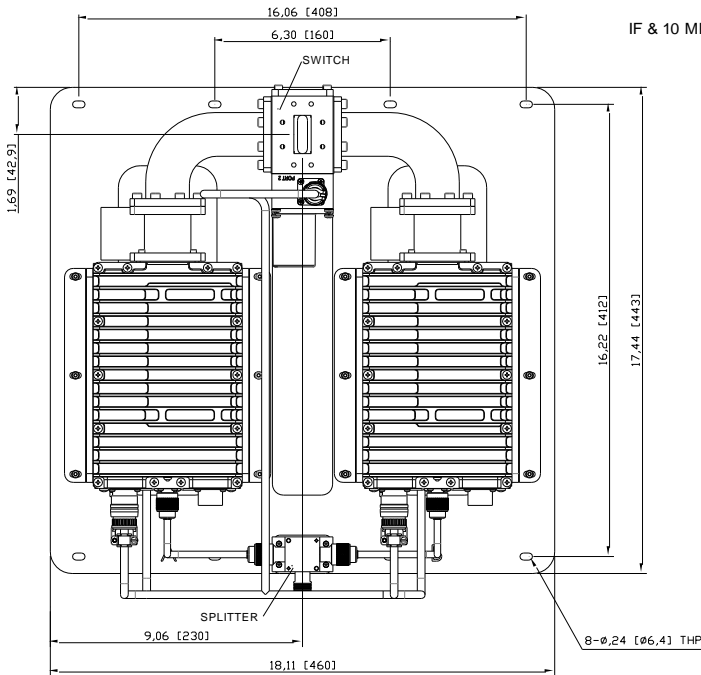


◆ Items Included in Kit

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



◆ Mechanical Diagram (Unit: inch (mm))



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RGXA – C040RK - A0
Optional 1:1 Redundancy Kit