

Block Up-Converter (BUC)

Ku-Band 60/80W



◆ 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

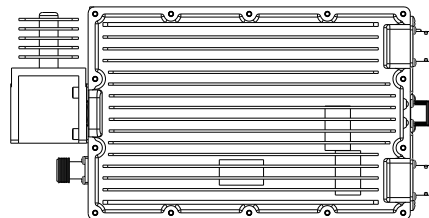
◆ Product Features

- | | <u>60W BUC</u> | <u>80W BUC</u> |
|---|----------------|----------------|
| • Variable power consumption | 320W (@48dBm) | 385W (@49 dBm) |
| • Optional equipment redundancy configurations | | |
| • Low phase noise (exceeds IESS308/309) | | |
| • Rugged design for extreme environments (-40 to +60°C) | | |

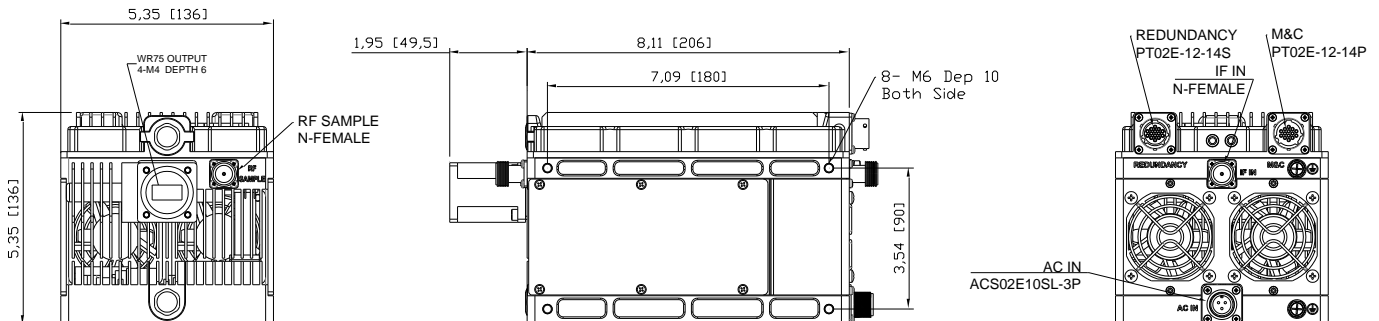
◆ Typical VSAT Applications

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

◆ Mechanical Diagram (Unit: inch [mm])



UNIT: in(mm)



Block Up-Converter (BUC)

Ku-Band 60/80W



SPECIFICATIONS

RF Specifications

RF Frequency	<u>Standard</u>	<u>Extended</u>
	14-14.50 GHz	13.75-14.50 GHz
IF Frequency	950-1450 MHz	950-1700 MHz
External Ref	10 MHz, 0 ± 5 dBm	
Output Power	<u>60W BUC</u>	<u>80W BUC</u>
Rated/Saturated	47.8 dBm	49 dBm
PLin ¹	47 dBm	48 dBm
PLin ²	46 dBm	47 dBm
PLin	45 dBm	46 dBm
IMD3 (@45dBm-60W)	- 25 dBc	
(@46dBm-80W)		
Small Signal Gain	70 dB	
Gain Variation	1 dB p-p / 36 MHz	
	3 dB p-p / 500 MHz	
	4 dB p-p / 750 MHz	
Gain stability	3 dB p-p	
Gain Adjustment	20 dB (50-70 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	-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>60W BUC</u>	<u>80W BUC</u>
@ Rated Output	320W	385W

Interfaces

RF Output Connector	WR75-G (Grooved)
RF Output VSWR	1.25:1
IF Connector	N-Type Female
IF Input VSWR	1.5:1
Power Connector	ACS02E-10SL-3P
M&C Connector	PT02E-12-14P (RS485/RS232/Eth) SNMPv2
Redundancy Connector	PT02E-12-14S
Alarm Status Indicator	LED (green/red)

Physical Parameters

Size (inches)	8.1*5.3*5.3
(mm)	206*136*136
Weight (lbs)	10.58
(kg)	4.8
Operating Temperature	-40 to +60°C (guarantee)
Humidity	0-100% (condensing)
Altitude	0-10,000 feet ASL

Part Number / Ordering Information

RGUC-U <u>abbb</u> -ACR <u>c</u> N-C0	
<u>a</u> : Frequency Range	<u>bbb</u> : Frequency Range
1 = 14.0-14.5 GHz	<u>060</u> = 60W
2 = 13.75-14.5 GHz	<u>080</u> = 80W
<u>c</u> : Reference type	
E = External reference 10MHz	
L = Internal reference 10MHz	

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)

Ku-Band 60/80W



◆ Mechanical Diagram (Unit: inch (mm))

Optional 1:1 Redundancy Configuration

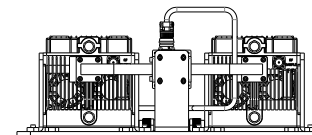
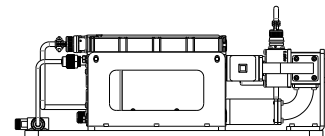
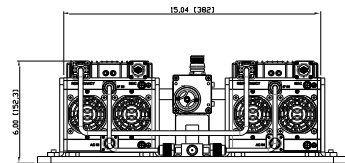
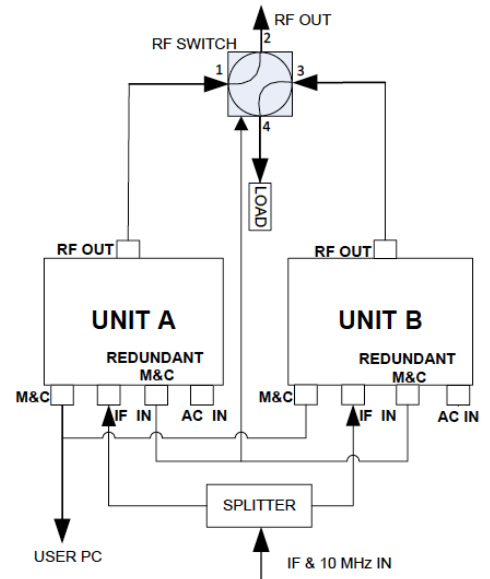
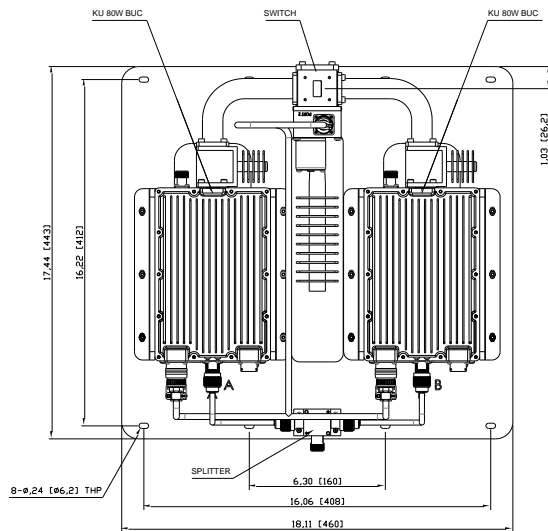
In the event of an equipment failure, the optional 1:1 redundancy kit switches traffic from the primary BUC to the standby BUC.

- Compatibility: 60, 80, 100, and 120W BUCs
- Switching Function: Auto or Manual
- Type of Standby: Cold-backup
- Rugged design for extreme environments

◆ Items Included in Kit

- WR-75 waveguide switch
- WR-75 Hi Power Load
- Splitter
- Interconnection cabling
- Mounting Frame x1

◆ Mechanical Diagram (Unit: inch [mm])



UNIT: in(mm)

◆ Part Number / Ordering Information

RGXA – KU080RK - C0

Optional 1:1 Redundancy Kit

◆ Contact Information

Website: www.revgo.com

Telephone: +1 (703) 348-9933

E-mail: Sales@RevGoGroup.com

Address: 12007 Sunrise Valley Dr., #450
Reston, VA 20191 USA

