

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

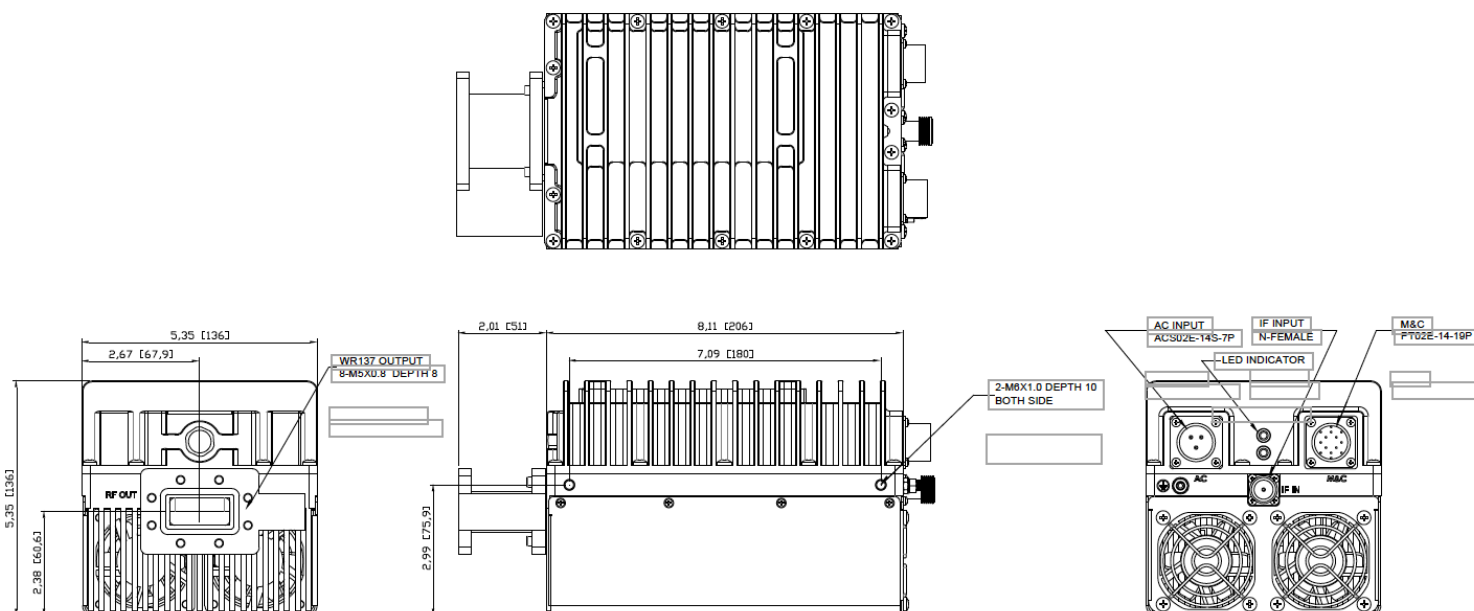
◆ Reliability

- 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

Block Up-Converter (BUC)

C-Band 20 / 40W



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)

◆ 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 |

◆ 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 |

◆ Contact Information

Website: www.RevGoGroup.com
 Telephone: +1 (703) 860-3522
 E-mail: Sales@RevGoGroup.com



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