Satellite Transceiver (TR)
Ka-Band 6 / 10W

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.

- Transceiver integrates 1XBUC, 1xLNB and an OMT (rejection filters)
- Block upconverter (BUC)
- Low noise block (LNB)
- 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

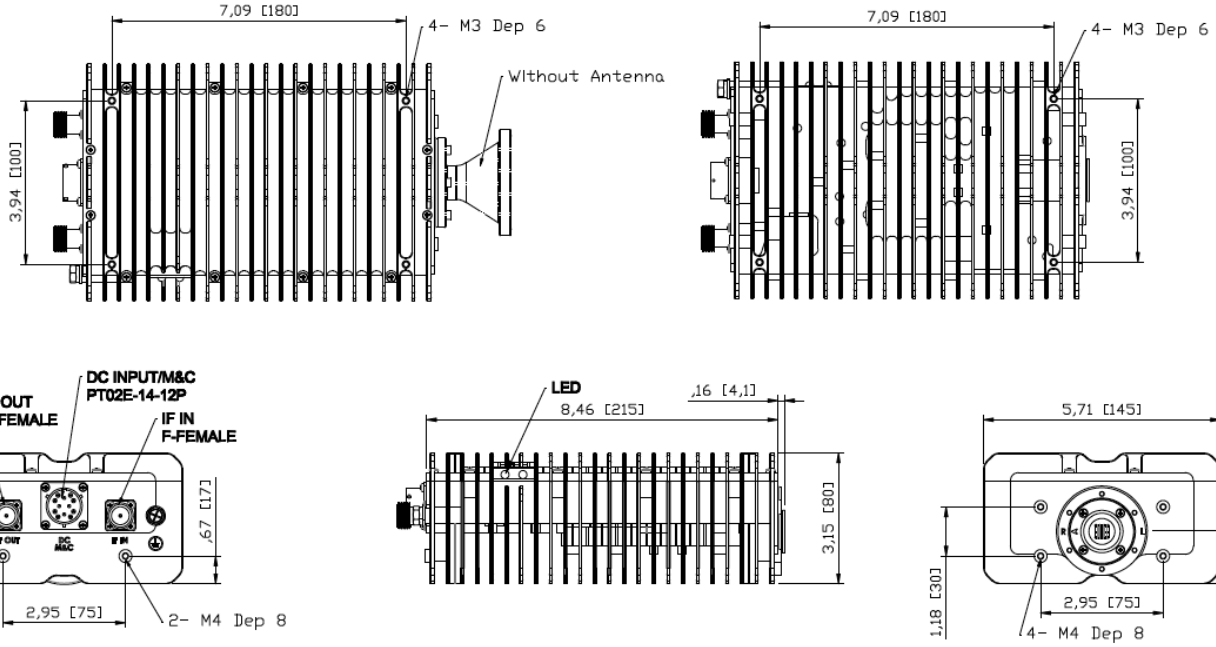
	6W	10W
• Variable power consumption	60W @38dBm	80W @40dBm
• Compact and light weight	3.3 lbs / 1.5kg	6.6 lbs / 3.0kg

- Single-, dual-, tri-band options (27.5-31GHz)
- Band selection from remote interface (SNMP)
- IFL input power or option for separate DC connector
- 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 – Dual Band (Unit: inch (mm))



Specifications subject to change without notice.

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RevGo

SPECIFICATIONS

Tx Specifications (BUC)

Tx RF Frequency	27.5-31 GHz 29.5-30GHz	
IF Frequency	950-1950MHz 950-1450MHz 1000-2000MHz	
External Reference	10MHz, 0±5dBm	
Output Power (dBm)	**6W**	**10W**
Rated/Saturated	38	40
PLin[1]	36	38
PLin[2]	35	37
PLin[3]	34	36
IMD3 (@3dB from rated power)	-25dBc	
	6W	**10W**
Small Signal Gain	65	70
Gain Variation	1dB p-p max./36MHz 3dB p-p max. /500MHz 4dB p-p max./1000MHz	
Gain stability	3dB p-p	
Gain Adjustment Range	20dB (Step: 0.1 dB)	
Phase Noise	-63dBc/Hz max.@100Hz -73dBc/Hz max.@1KHz -83dBc/Hz max.@10KHz -93dBc/Hz max.@100KHz	
Output Spurious	-55dBc max.	

Notes:
PLin[1]: -26 dBc regrowth, 1.5 SR (commercial satellite)
PLin[2]: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one-carrier)
PLin[3]: <-25 dBc IMD3 (MIL-STD-188-164B, two-carrier)

Part Number / Ordering Information

R G U C - A **a b b c d e f g**

A: Ka-Band

a: Tx Frequency Band
1 = 29-30 GHz
2 = 29.5-30 GHz
3 = 30-31 GHz
4 = 29-30 GHz & 30-31 GHz
A = 27.5-28.5 GHz
B = 28.25-29.25 GHz
C = 27.5-30 GHz
D = 28-31 GHz

bb: Output Power
06 = 6W
10 = 10W

c: Input power
F = VDC via IFL
M = VDC via M&C

d: Tx Ref Signal Type
1 = 10 MHz external ref
2= 10 MHz internal ref

e: Rx Frequency Band
1 = 17.2-18.2 GHz
2 = 18.2-19.2 GHz
3 = 19.2-20.2 GHz
4 = 20.2-21.2 GHz
5 = 21.2-21.7 GHz
6 = 18.2-20.2 & 19.2-20.2 GHz
7 = 19.2-20.2 & 20.2-21.2 GHz
8 = 17.70-18.70 GHz
9 = 18.45-19.45 GHz
T = Triband (3, 8, & 9)

f: Rx Ref Signal Type
E = 10 MHz external ref
I = 10 MHz internal ref

g: Polarization Mode
1 = Tx: RHCP, Rx: LHCP (fixed)
2 = Tx: LHCP, Rx: RHCP (fixed)
3 = Tx: RHCP, Rx: RHCP (fixed)
4 = Tx; LHCP, Rx: LHCP (fixed)

Rx Specifications (LNB)

Rx Frequency	19.2-20.2 & 20.2-21.2 GHz 18.2-19.2 & 19.2-20.2 GHz 17.7-18.7 18.45-19.45 & & 19.2-20.2 GHz
Output Frequency	950-1950 MHz
Noise Figure	1.8 dB (including OMT/filters)
Reference Signal	External Ref: 10 MHz +/-5 dBm Internal Ref: +/- 1ppm (optional)
Gain	60 dB typ, 55 dB min
Gain Flatness	4 dB p-p / 1000 MHz max
Gain Stability	4 dB max
Phase Noise	-63 dBc/Hz @ 100 Hz -73 dBc/Hz @ 1 KHz -83 dBc/Hz @ 10 KHz -93 dBc/Hz @ 100 KHz

Power Supply

Input Pwr	+18 to +56 vDC	
Pwr Consumption	**6W**	**10W**
@ PLin1 Output	55W	75W
@ Rated Output	70W	90W

Interfaces

RF Output Conn	WR28-G (Grooved)
RF Output VSWR	Tx = 1.25:1, Rx = 2:1
IF Input Connector	N-Type or F-Type
IF Input VSWR	1.5:1
Power Connector	ACS02E10SL-4P
M&C Connector	PT02E-12-14P RS485, RS232 & Ethernet
Alarm Indicators	LED

Physical Parameters

Size	**(inches)**	8.47*5.71*3.15
	(mm)	215*145*80
Weight	**(lbs)**	0.77
	(kg)	1.7
Operating Temp		-40 to +60oC
Humidity		0-100% (condensing)
Altitude		0-40,000 feet ASL

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