

# Satellite Transceiver

## Ka-Band TR 4W



### ◆ 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
- 3 to 300W output power

### ◆ Reliability

- Highly integrated RF technologies
- 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

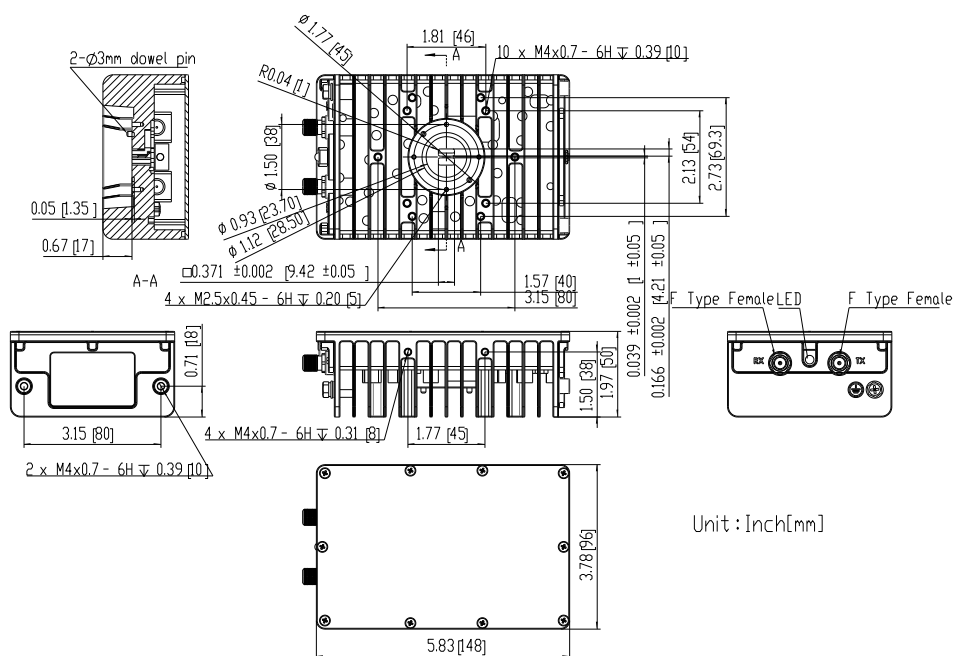
#### 4W TR

- Portable power consumption 35W @36 dBm
- Compact size and light weight 148\*96\*50 mm 0.8 kg
- Input power via IFL
- Covers 1 GHz of RF bandwidth, transmit and receive
- Rugged design for extreme environments (-40 to +55°C)

### ◆ Typical VSAT Applications

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

### ◆ Mechanical Diagram (Unit: inch [mm])



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### SPECIFICATIONS

#### ◆ Tx Specifications

<b>Tx RF Frequency</b>	29.00-30.00 GHz
<b>IF Frequency</b>	1400-2400 MHz
<b>LO Frequency</b>	27.60 GHz
<b>Ref Signal Type</b>	10 MHz external ref
<b>External Reference</b>	10 MHz, 0±5 dBm
<b>Output Power</b>	<b>4W</b>
<b>Rated/Saturated</b>	36 dBm
<b>ACPR @35dBm</b>	-22 dBc
<b>Small Signal Gain</b>	55±4 dB    51 dB min.
<b>Gain Flatness</b>	1 dB p-p max./36MHz 5 dB p-p max./1000MHz
<b>Gain stability</b>	3 dB p-p
<b>Phase Noise</b>	2.2° max. @RMS 100Hz to 1MHz
<b>Output Spurious</b>	-50 dBc max.

#### ◆ TX Power Supply

<b>Input Power (DC)</b>	+ 18 to +36 VDC
<b>Pwr Consumption</b>	30 W typ. 35 W max.

#### ◆ Physical Parameters

<b>Size (inches)</b>	5.82*3.77*1.96
<b>(mm)</b>	148*96*50
<b>Weight (lbs)</b>	1.76
<b>(kg)</b>	0.8

#### ◆ Interfaces

<b>TX Connector</b>	F-Type (75 Ω)
<b>RX Connector</b>	F-Type (75 Ω)

#### ◆ Part Number / Ordering Information

RGTR-A104-bA01-TXLF-D

##### a: Rx Frequency

6= 18.20-20.20 GHz  
7= 19.20-21.20 GHz  
8= 17.80-20.20 GHz

#### ◆ Rx Specifications

<b>Rx Frequency</b>	17.80-19.00 & 19.00-20.20 GHz 18.20-19.20 & 19.20-20.20 GHz 19.20-20.20 & 20.20-21.20 GHz
<b>Output Frequency</b>	950-1950 MHz / 950-2150 MHz
<b>LO Frequency</b>	16.85 GHz & 18.05 GHz
Dual-LO switched by voltage	17.25 GHz & 18.25 GHz (optional) 18.25 GHz & 19.25 GHz (optional)
<b>LO Stability</b>	Internal Ref: ±3 ppm max.
<b>Noise Figure</b>	1.5 dB typ.
<b>P-1dB</b>	10 dBm min.
<b>Gain</b>	52 dB min.
<b>Gain Flatness</b>	1 dB p-p / 36 MHz max. 5 dB p-p / 1000 MHz max.
<b>Image Rejection</b>	30 dBc
<b>Phase Noise</b>	2.0° max. @ RMS 1kHz to 1MHz

#### ◆ RX Power Supply

<b>Input Power (DC)</b>	+12 to +24 VDC
<b>Pwr Consumption</b>	4 W

<b>Operating Temp</b>	-40 to +55 °C
<b>Humidity</b>	0-100% (condensing)
<b>Altitude</b>	0-10,000 feet ASL
<b>Alarm Indicators</b>	LED *1
<b>protection</b>	IP67

#### ◆ Alarm

<b>Normal</b>	Green always on
<b>TX PLL unlock</b>	Red Flash
<b>Abnormal</b>	Red always on

#### ◆ Contact Information

<b>Website:</b>	www.RevGoGlobal.com
<b>Telephone:</b>	+1 (703) 348-9933
<b>E-mail:</b>	Sales@RevGoGroup.com
<b>Address:</b>	12007 Sunrise Valley Dr., #450 Reston, VA 20191 USA

