

Satellite Transceiver

Ka-Band 10W



◆ Company Overview

RevGo designs and manufactures satellite earth station RF from low to High 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 up converter (BUC)
- Low noise block (LNB)
- C-, Ku-, DBS-, Ka-bands
- 3 to 1000W 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

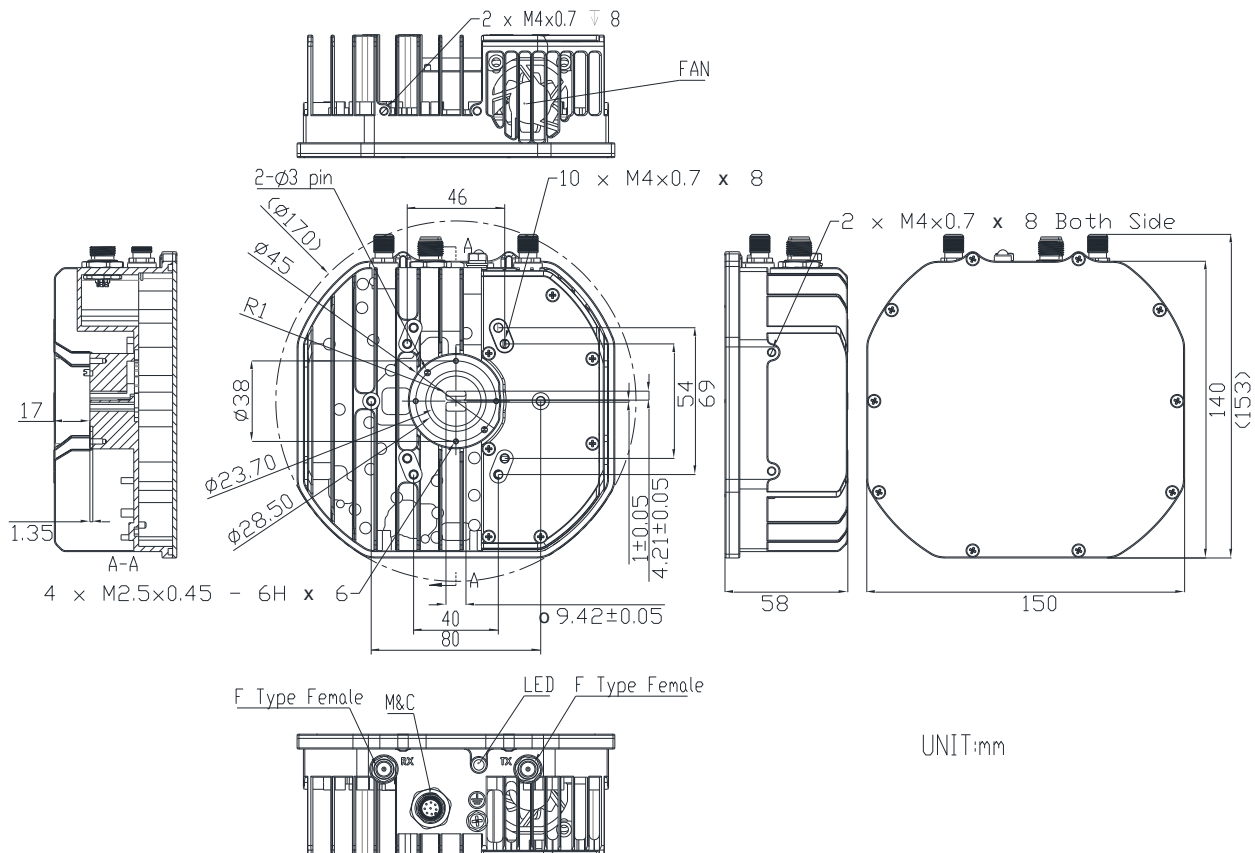
10W

- Variable power consumption 60W @40 dBm
- Compact and light weight 150x140x58 mm
- Rugged design for extreme environments (-40 to +60°C)

◆ Typical Applications

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

◆ Mechanical Diagram (Unit: mm)



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SPECIFICATIONS

◆ Tx Specifications

Tx RF Frequency	29.00-30.00 GHz
IF Input Frequency¹	1400-2400 MHz
LO Frequency [GHz]	27.60 GHz
External Reference	10 MHz, 0±5 dBm
Output Power	10W
Rated/Saturated	40 dBm
Plin¹	39 dBm
Plin²	37 dBm
Small Signal Gain	65 dB (50-65 dB, Step by 0.25 dB)
Gain Flatness	3 dB p-p/500 MHz 4 dB p-p/1000 MHz
Gain stability	3 dB p-p
Phase Noise	≤ -60 dBc/Hz @ 100 Hz ≤ -73 dBc/Hz @ 1 KHz ≤ -83 dBc/Hz @ 10 KHz ≤ -93 dBc/Hz @ 100 KHz
Output Spurious	-55 dBc

◆ Rx Specifications

Rx Frequency	Quad-band (4 LOs)	Dual-Band (2 LOs)
	17.70-18.70 GHz	18.20-20.20 GHz
	18.45-19.45 GHz	19.20-21.20 GHz
	19.20-20.20 GHz	(optional)
	20.20-21.20 GHz	
Output Frequency	950-1950 MHz/950-2150 MHz	
LO Frequency	16.75/17.5/18.25/19.25 GHz (For Quad-band)	
switched by M&C	17.25/18.25 GHz (For Dual-band)	
	18.25/19.25 GHz (For Dual-band)	
LO Stability	±1 ppm (Internal Ref)	
Noise Figure	1.5 dB typ., 1.6 dB max. @ 20.2-21.2 GHz	
P-1dB	10 dB min.	
Gain	60 dB	
Gain Flatness	1 dB p-p / 36 MHz 5 dB p-p / 1000 MHz	
Image Rejection	30 dB typ. 20 dB @ 19.25 GHz	
Phase Noise	≤ -73 dBc/Hz @ 1 KHz ≤ -83 dBc/Hz @ 10 KHz ≤ -93 dBc/Hz @ 100 KHz	

◆ Physical Parameters

Size (inches)	5.90*5.51*1.97
(mm)	150x140x58
Weight (lbs)	3.08
(kg)	1.4

Operating Temp	-40 to +60 °C
Humidity	0-100% (condensing)
Altitude	0-10,000 feet ASL
protection	IP67

◆ TX Power Supply

Input Power	18 - 55 VDC
Power Consumption	10 W
Prated (including Fan)	60 W typ. 70 W max

◆ RX Power Supply

Input Power	+12 to +24 VDC (< 15VDC, L-Band; > 16VDC, H-Band)
Power Consumption	6 W

◆ Interfaces

IF Connector	N-Type (50 Ω), F-Type (75 Ω) optional
MS Connector	4-Pin for Power supply
TE T4130012081-000	4-pin for M&C (RS422/RS485)

◆ Part Number / Ordering Information

RGTR-A110-<u>a</u>A01-CMX<u>b</u>-D0	
a: Input RF Frequency	b: IF Connector
Q= 17.70-21.20 GHz	N= N-type
6= 18.20-20.20 GHz	F= F-type
7= 19.20-21.20 GHz	
8= 17.80-20.20 GHz	

◆ Contact Information

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