Typical VSAT Applications

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

CE

Block Up-Converter Ka-Band 80W (BUC)

Model: GB80KA27531

Section	Item	Specification
Power Requirement	RF Frequency	27.5-31Ghz
	IF Frequency	950-1950 MHz 950-1450 MHz 1000-2000 MHz
	External Ref	10 MHz, 0±5 dBm
	Outpower	
	Rated/Saturated	49 dBm
	PLin1	48.5 dBm
	PLin2	48 dBm
	PLin3	47 dBm
	IMD3 (3dB from rated)	-25 dBc
	Small Signal Gain	70 dBm
	Gain Variation	1 dB p-p / 36 MHz 3 dB p-p / 500 MHz 4 dB p-p / 750 MHz
	Gain Stability	-20 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	-55 dBc (max)

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Notes

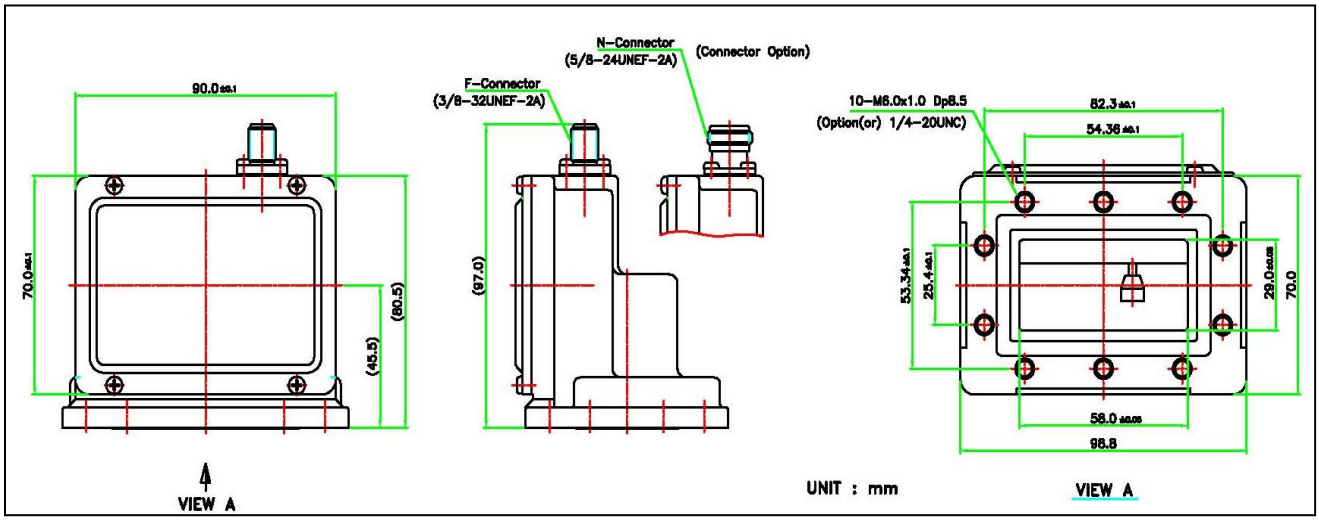
PLin1: -26 dBc regrowth, 1.5 SR (commercial satellite)

PLin2: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one -carrier)

PLin3: <-25 dBc IMD3 (MIL-STD-188-164B, two-carrier)

Section	Item	Specification
Power Supply	Input Power	ACS02E10SL-4P
	Power Consumption	
	@ PLin3 Output	300 W
	@ Rated Output	450 W
Interfaces	RF Output Connector	WR28-G (Grooved)
	RF Output VSWR	1.25:1
	IF Input Connector	N-Type Female
	IF Input VSWR	1.5:1
	Power Connector	AMPHENOL C01610C00600012
	M&C Connector	RJ45 (Ethernet)
	Alarm Status Indicator	LED (green/red)
Physical Parameters	Size (inches)	10.2*5.4*4.7
	(mm)	259*136*118
	Weight	12 lbs
		5.8 kg
	Operating Temperature	-40 to +60 ℃
	Humidity	0-100% (Condensing)
	Altitude	0-15000 feet ASL

Available 3 frequencies per unit:

Frequency Listing			
Bank ID	Tx Range (GHz)	IF Range (MHz)	LO (GHz)
1 =	29.0-30.0	950-1950	28.05
2 =	29.5-30.0	950-1450	28.55
3 =	30.0-31.0	950-1950	29.05
4 =	Band 1 = 29.0 - 30.0 Band 2 = 30.0 - 31.0	950 – 1950 950 - 1950	28.05 29.05
5 =	27.652 - 28.388	1052 - 1788	26.60
6 =	28.172 - 29.071	972 - 1871	27.20
7 =	Band 1 = 27.652 - 28.388 Band 2 = 28.172 - 29.071	1052 – 1788 972 - 1871	26.60 27.20
T =	Band 1 = 27.50 - 28.50 Band 2 = 28.25 - 29.25 Band 3 = 29.00 - 30.00	950 – 1950 950 – 1950 950 – 1950	26.55 27.30 28.05

Mechanical Diagram (Unit: inch (mm))