



### Typical VSAT Applications

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



## Block Up-Converter Ka-Band 40W (BUC)

Model: GB40KA27531

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	47 dBm
	PLin1	46 dBm
	PLin2	45 dBm
	PLin3	44 dBm
	IMD3 (3dB from rated)	-25 dBc
	Small Signal Gain	70 dBm
	Gain Variation	
		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	225 W
	@ Rated Output	350 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 °C
	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	950 – 1950	28.05
	Band 2 = 30.0 - 31.0	950 - 1950	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	1052 – 1788	26.60
	Band 2 = 28.172 - 29.071	972 - 1871	27.20
T =	Band 1 = 27.50 - 28.50	950 – 1950	26.55
	Band 2 = 28.25 - 29.25	950 – 1950	27.30
	Band 3 = 29.00 - 30.00	950 – 1950	28.05

Mechanical Diagram (Unit: inch (mm))

