



- Extremely high power density - up to 200W Psat
- Phase noise 6dB better than IESS308/309
- Light Weight & Small Size
- P1dB of 43dBm min
- Spurious below -60dBc
- Switchable LO option - standard and Extended Ku-Band in one unit
- Built In Output Isolator provides full output VSWR Protection
- Built in auto-ranging AC power supply
- 48VDC isolated power supply optional
- 3 Year GeoSat Product Warranty

## 20W Ku-Band Block Up-Converter (BUC)

Model: GB43FKUAC / GB43FKUDC



Section	Item	Specification
Power Requirement	AC Voltage Range	90-265VAC 50-60Hz auto-ranging
	48V DC Voltage Range (optional)	32-72VDC Isolated
	Power Consumption	180W AC power in / 160W DC power in
Interface:	IF Input Connector	N-Female
	RF Output Connector	WR75 grooved
	AC Power In	MS3112E10-8P
	RS485-RS232-Ethernet-SNMP	MS3112E14-19S
Mechanical:	Dimension	6.25"x6.45"x3.9"
	Weight	5.5lbs
	Cooling	Forced Air
	Operating Temperature	-40°C to +55°C
	Relative Humidity	Up to 100% condensing
Part Numbering Information	AC Auto-ranging Power Supply	GB43FKUAC
	DC Isolated Power Supply	GB43FKUDC

Contact us for the part number per frequency sub-band options

Continued on the next page ▼

Section	Item	Specification	
RF Performance:	RF Frequency Range-Available in/sw itched	14-14.5GHz / 13.75-14.5GHz	
	IF Frequency Range	950-1450MHz / 950-1700MHz	
	LO Frequency	13.05GHz / 12.8GHz	
	Conversion	Single Conversion; non-inverting	
	Output Pow er at 1dB compression point	43dBm min	
	Saturated Pow er	44dBm typ	
	Conversion Gain	72dB min, 75dB typ	
	Gain Flatness ▼		
			+/-1dB typ +/-1.5dB max over full band;
			+/-0.5dB max over any 40MHz
	Gain Stability		+/-1.5dB over full temperature range
	Gain Control		20dB min dynamic range
	External Reference Frequency		10MHz multiplexed w ith IF In
	External Reference Required Phase Noise ▼		
		100Hz	-130 dBc/Hz max.
		1kHz	-140 dBc/Hz max.
		10kHz	-150 dBc/Hz max.
		100kHz	-155 dBc/Hz max.
	Up-Converter Phase Noise ▼		
		100Hz	-70 dBc/Hz max.
	1kHz	-80 dBc/Hz max.	
	10kHz	-90 dBc/Hz max.	
	100kHz	-95 dBc/Hz max.	
	1mHz	-115 dBc/Hz max.	
Linearity: 2 tone IMD Spectral Re-growth ▼			
		-25dBc at 3dB total power back off from P1dB	
		-30dBc for QPSK at 1.5xsymbol rate at 2dB back off from P1dB	
Output Spurious ▼			
	Non-signal related	-60dBc	
	Signal related	-55dBc	