



- Extremely high power density - up to 200W Psat
- Phase noise 6dB better than IESS308/309
- Light Weight & Small Size
- P1dB of 42dBm 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

16W Ku-Band Block Up-Converter (BUC)

Model: GB42FKUAC / GB42FKUDC



| Section | Item | Specification |
|----------------------------|---------------------------------|-------------------------------------|
| Power Requirement | AC Voltage Range | 90-265VAC 50-60Hz auto-ranging |
| | 48V DC Voltage Range (optional) | 32-72VDC Isolated |
| | Power Consumption | 150W AC power in / 135W 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 | GB42FKUAC |
| | DC Isolated Power Supply | GB42FKUDC |

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

Continued on the next page ▼

Request A Quote

| 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 | 42dBm min | |
| | Saturated Pow er | 43dBm 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 f from P1dB | |
| | | -30dBc for QPSK at 1.5xsymbol rate at 2dB back off from P1dB | |
| Output Spurious ▼ | | | |
| | Non-signal related | -60dBc | |
| | Signal related | -55dBc | |