WAVESTREAM

60W KU-BAND BUC

BUE060G02A

FIELD-PROVEN PERFORMANCE

Wavestream's Ku-band GaN Block Upconverter (BUC) offers unmatched efficiency and performance suitable for mobile SATCOM, flyaway and VSAT systems.

The Ku-band BUC incorporates Wavestream's next generation Spatial advantEdge™ technology to provide higher output power in smaller, lighter weight packages that are more reliable and use less energy. Every unit is thoroughly tested to guarantee performance over the full frequency band and over the full temperature range.

FEATURES

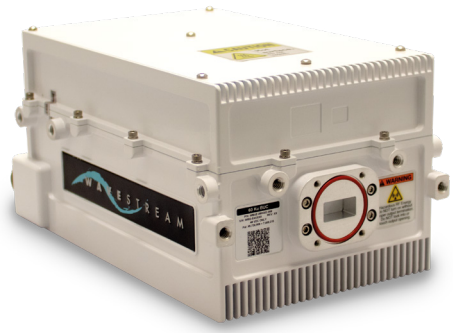
- Small, Lightweight Package
- State Of the Art GaN Technology
- Low Power Draw, High MTBF
- Flexible, Modular Feed-Mount Design
- Holds Specs Over Temperature and Frequency

WAVESTREAM ADVANTAGES

Wavestream products are biased for Class AB operation, drawing less power when backed off to help save valuable energy resources. They generate less heat, ensuring a higher Mean Time Between Failures (MTBF) for greater reliability and lower lifecycle costs.

BENEFITS

- **Higher output power with less energy usage**
- **Proven reliability and efficiency**
- **Reduced lifecycle maintenance costs**
- **Compact footprint to meet critical space and weight limitations**



TECHNICAL SPECIFICATIONS

RF SPECIFICATIONS

Transmit Frequency:
13.75 GHz - 14.5 GHz
IF Frequency:
950 MHz - 1700 MHz
Frequency Reference (10 MHz on IF): 0 dBm ± 5 dB
Small Signal Gain:
70 dB (nominal)
Gain Adjustment:
30 dB in 0.5 dB steps (nominal)
Gain Variation:
- Over frequency at fixed temp: 3 dB p-p over 500 MHz
- Over temp at fixed frequency: 3 dB p-p over operating range

Peak Envelope Power:
47.8 dBm (nominal)
Linear Output Power: 45 dBm
Linear Output Power, defined as:
- Intermodulation (Third order intermodulation product relative to combined power of two carriers): -25 dBc
- Spectral Regrowth (For QPSK at 1.5x and OQPSK at 1.0x rate offset): -30 dBc
- AM/PM Conversion: 2 deg/dB

Phase Noise: Meets IESS-308
Noise Power Density Transmit:
-70 dBW/4 kHz (maximum)
Noise Power Density Receive:
-150 dBW/4 kHz (maximum)
Output Spurious: -55 dBc

INTERFACES

IF Input Connector:
Type N Female
IF Input Impedance: 50 Ohms
IF Input VSWR:
1.5:1 maximum
RF Output Connector: WR-75
RF Output VSWR:
1.5:1 maximum
DC Connector and M&C Connector:
32-Pin or 12-pin MIL Circular
M&C:
Serial RS-485 /RS-232 (SA-bus), Forward Power Monitor, Step Attenuator, Ethernet option, Input power detector, RF soft start

POWER

DC Power: 22V to 50V
DC Power Draw:
(typical) (at Linear Power): 255W

PHYSICAL

Size:
10.3" L x 5.4" W x 4.4" H (26.2 x 13.7 x 11.2 cm)
Weight: 7.2 lbs (3.27 kg)
Operating Temperature (Ambient Air):
-40°F to +140°F
(-40°C to +60°C)
Relative Humidity:
100% Condensing
Shock & Vibration:
MIL-STD-810G & Method 514.6 & Method 516.6
Altitude:
10,000 ft above sea level (operating)
Electromagnetic compatibility:
MIL-STD-461, CE MARK

OPTIONS

External Power Supply:
- AC-DC Converter, 90-264 VAC
- DC Power, IFL Option (48V only at 40W)

M&C:
Ethernet (TCP/IP, WebGUI, SNMP), RS-232, RS-485

BASE MODEL

UEB60G00A

DCP 0000234_A

ABOUT WAVESTREAM

Wavestream sets the standard in the design and manufacture of next generation high power solid state amplifiers. Wavestream's Family of Ka, Ku and X-band Solid State Power Amplifiers (SSPAs), Block Upconverters (BUCs) and transceivers provide systems integrators with field-proven, high performance solutions designed for ground mobile and fixed, gateway and airborne satellite communication systems worldwide.

These items are subject to the Export Administration Regulations (EAR), 15 C.F.R. Parts 730-774, and may not be exported or transferred to any non-U.S. person, except as authorized by the U. S. Department of Commerce.

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