

FEATURES

- 25W of Output Power for High Data Rate Capability
- Industry's Highest Efficiency drawing only 180W at Linear Output Power
- Ultra-Compact 4.5 lb Package
- High Reliability for long life under the harshest conditions
- Small enough to be mounted directly to the feed of most antennas
- Multiple M&C interfaces: Ethernet, RS-485, RS-232, and Bluetooth remote control



The 25W *Stinger* Ka-Band Block Upconverter is the industry's smallest & lightest weight 25W solid state power amplifier at Ka-Band. Mission Microwave's proprietary power combining technology and thorough system optimization have produced a rugged 4.5 lb amplifier that can mount directly to the feed port of most satellite antennas, eliminating additional loss to the feed.

The revolutionary design features a compact form factor which provides improved cooling over more conventional package designs. Improved cooling equates to higher reliability, even in the most demanding of applications and extreme environments (-40°C to +60°C). The BUC's stellar performance offers the highest useable output power for the lowest power consumption of any amplifier in its class.

Frequency (selectable)

Band 1	29.0 to 29.5 GHz
Band 2	29.5 to 30.0 GHz
Band 3	30.0 to 31.0 GHz

L-Band Input

Band 1	950 to 1450 MHz
Band 2	1450 to 1950 MHz
Band 3	1000 to 2000 MHz

Output Power

Saturated (P _{sat})	44 dBm / 25.1 W
Linear (Plin 1-Carrier)	42 dBm / 15.8 W
Linear (Plin 2-Carrier)	41 dBm / 12.6 W

Gain (min)

65 dB

Gain Variation

Over temp, fixed freq	3 dB p-p
Over freq fixed temp full band	3 dB p-p
36 MHz	0.6 dB p-p

Variable Attenuator

30 dB 0.25 dB step

Intermodulation

combined two equal carriers 3 dB BO from P _{sat}	-25 dBc
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Spectral Regrowth

QPSK @ 1.5 x SR and 2dB OBO	<-30 dBc
OQPSK @ 1 x SR and 2dB OBO	<-30 dBc

Phase Noise

@ 10 Hz	-32 dBc/Hz
@ 100 Hz	-62 dBc/Hz
@ 1 KHz	-72 dBc/Hz
@ 10 KHz	-82 dBc/Hz
@ 100KHz	-92 dBc/Hz

AM/PM Conversion

up to 2 dB OBO from P_{sat} 2.0°/ dB

Noise Power Density

Receive Band	-150 dBW / 4 kHz
Transmit Band	-80 dBW / 4 kHz

Spurious Output

In-band	-60 dBc
Out-of-band	-60 dBc

Prime Power

22 to 54 VDC

Power Consumption

Maximum	220 W
Linear (typ)	180 W

Operating Temperature

-40°C to +60°C

Relative Humidity

100% condensing

Shock

20 g peak, 11 msec, 1/2 sine

Vibration

MIL-810E, 514-4 transport

M&C

4-Wire interface (selectable)	Ethernet, RS-232, RS485
Wireless	Bluetooth

Dimensions

L x W x H (in)	9" x 3.5" x 3.5"
L x W x H (mm)	229 x 89 x 89

Weight

lbs	4.5
kg	2.0

For information purposes only. Data subject to change

Patents Pending

