

## FEATURES

- 55W of Output Power for High Data Rate Capability
- Industry's Highest Efficiency drawing only 215W 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 55W *Stinger* Block Upconverter is the industry's smallest & lightest weight 55W solid state power amplifier. 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)

Standard Band	14.00 to 14.50 GHz
Extended Band	13.75 to 14.50 GHz

## L-Band Input

Standard Band	950 to 1450 MHz
Extended Band	950 to 1700 MHz

## Output Power

Saturated (P <sub>sat</sub> )	47.4 dBm / 55 W
Linear (Plin 1-Carrier)	45.4 dBm / 34 W
Linear (Plin 2-Carrier)	44.4 dBm / 28 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

carriers 3 dB BO from P <sub>sat</sub>	-25 dBc
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## Spectral Regrowth

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

## RF Output VSWR

1.25:1 Max w/  
external isolator

## Phase Noise

@ 10 Hz	-33 dBc/Hz
@ 100 Hz	-63 dBc/Hz
@ 1 KHz	-73 dBc/Hz
@ 10 KHz	-83 dBc/Hz
@ 100KHz	-93 dBc/Hz

## AM/PM Conversion

up to 2 dB OBO from P <sub>sat</sub>	2.0°/ dB
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## Noise Power Density

Receive Band	-150 dBW / 4 kHz
Transmit Band	-70 dBW / 4 kHz

## Spurious Output

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

## Prime Power

22 to 54 VDC

## Power Consumption

Maximum	270 W
Linear (typ)	215 W

## Operating Temperature

-40°C to +60°C

## Relative Humidity

100% condensing

## Shock

20g peak, 11 ms,  
1/2 sine

## Vibration

MIL-810E, 514-4  
transportation

## M&C

4-wire Interface (selectable)	Ethernet, RS-232, RS485
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Wireless

Bluetooth

## Dimensions

L x W x H (in)	10.4" x 3.5" x 3.5"
L x W x H (mm)	264 x 89 x 89

## Weight

lbs	4.5
kg	2.0

For information purposes only. Data subject to change

Patents Pending