

## FEATURES

- 200W of Saturated Output Power for Fixed and Mobile High Data Rates
- Industry's Highest Efficiency drawing only 670W at Linear Output Power
- Extremely Compact 16 lb Package
- High Reliability for long life under the harshest conditions
- Small enough to integrate directly onto boom arm
- Multiple M&C interfaces: RS-485, RS-232, optional Ethernet, optional Bluetooth remote control
- Optional 1:1 or 1:2 Redundancy Systems



The 200W **TITAN** Ku-Band Block Upconverter is the industry's most compact & lightweight 200W solid state power amplifier. Mission Microwave's proprietary power combining technology and thorough system optimization have produced a rugged 16 lb amplifier that mounts directly on an antenna boom, eliminating excess losses 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.

# Ku-Band TITAN Block Upconverter

## 200W

### 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

$P_{RATED}$	53 dBm / 200 W
$P_{LIN1C}$	51 dBm / 126 W
$P_{LIN2C}$	50 dBm / 100 W

### Gain (nom)

70 dB

### Gain Variation

Over temp, fixed freq	4 dB p-p
Over freq fixed temp full band	4 dB p-p
36 MHz	1.0 dB p-p

### Variable Attenuator

31 dB 0.25 dB step

### Intermodulation

2 carriers @ $P_{LIN2C}$	-25 dBc
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### Spectral Regrowth

QPSK @ 1.5x SR @ $P_{LIN1C}$	<-30 dBc
OQPSK @ 1x SR @ $P_{LIN1C}$	<-30 dBc

### Input VSWR

2:1 typ

### Output VSWR

1.35:1 max

### 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
@ 1 MHz	-103 dBc/HZ

### AM/PM Conversion

@ $P_{LIN1C}$	2.0° / dB
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### Noise Power Density

Receive Band	-156 dBm / Hz
Transmit Band	-77 dBm / Hz

### Spurious Output

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

### Prime Power

90 to 264 VAC  
50-60 Hz

### Power Consumption

$P_{RATED}$	1200 W
$P_{LIN2C}$	670 W

### Operating Temperature

-40°C to +60°C

### Relative Humidity

100% condensing, IP67

### Shock

20g peak, 11 ms,  
1/2 sine

### Vibration

MIL-810F, 514.5C-2  
transportation

### M&C

19-pin connector	RS-485, RS-232
Wireless	Optional: Ethernet SNMPv3 Optional: Bluetooth

### Dimensions

L x W x H (in)	15.5" x 7.0" x 7.0"
L x W x H (mm)	394 x 178 x 178

### Weight

lbs	16
kg	7.3