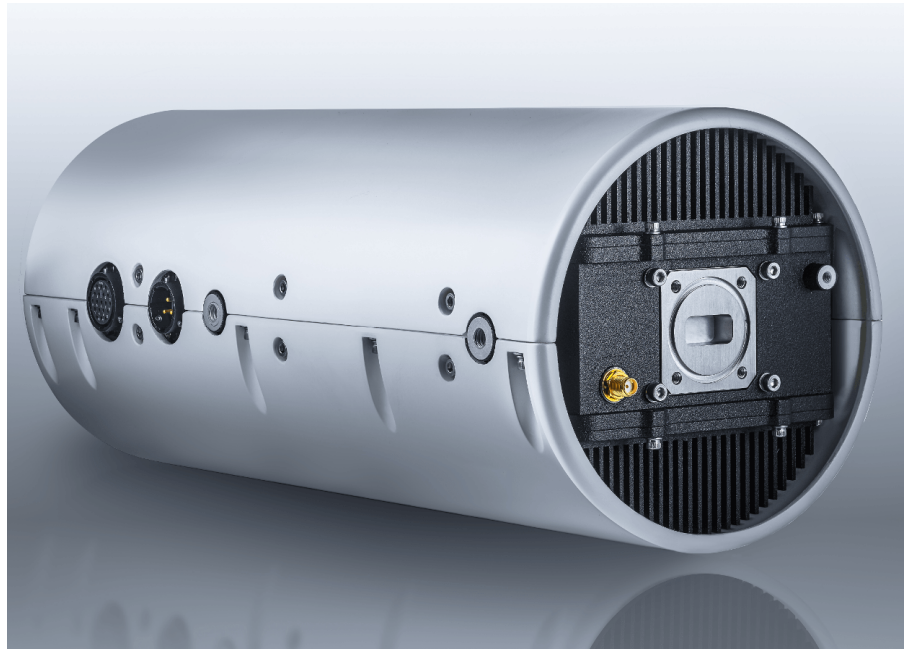


FEATURES

- 100W Psat for Fixed and Mobile High Data Rates
- Industry-Leading Efficiency drawing only 360W at Linear Output Power
- Extremely Compact 11 lb Package
- High Reliability for long life under the harshest conditions
- Small enough to integrate directly onto boom arm
- Integrated AC-DC power supply
- Multiple M&C interfaces: Ethernet, RS-485, RS-232, and Bluetooth remote control



The 100W *Javelin* Block Upconverter is the industry's most compact & lightweight 100W solid state power amplifier. Mission Microwave's proprietary power combining technology and thorough system optimization have produced a rugged 11 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.

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 _{sat})	50 dBm / 100 W
Linear (P _{lin} 1-Carrier)	48 dBm / 63 W
Linear (P _{lin} 2-Carrier)	47 dBm / 50 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 _{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

RF Output VSWR

1.25:1 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

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	-70 dBW / 4 kHz

Spurious Output

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

Prime Power

90 to 264 VAC
50-60 Hz

Power Consumption

Maximum	450 W
Linear (typ)	360 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

19-pin connector	Ethernet, RS-232, RS485
Wireless	Bluetooth

Dimensions

L x W x H (in)	13.2" x 5.5" x 5.5"
L x W x H (mm)	335 x 140 x 140

Weight

lbs	11
kg	5