

V2 Microwave

Odin Series BUC's

C - band GaN BUC's
25 W - 1000 W



Odin BUC Superiority

The V2 Microwave Series of BUCs are designed for fixed, mobile and flyaway applications. They consist of outdoor power amplifiers with built-in upconverters using GaAs/GaN technologies. The lightweight, compact design allows for portability as well as various mounting configurations.

Each model has full monitoring and control capabilities to allow the operator the peace of mind that the unit is fully operational. For added protection, each BUC has built-in redundancy to allow the optional upgrade to a 1:1 or 1:2 system in the field.

Features

- High efficiency and low power consumption
- Monitor and Control
- Redundancy Ready
- Lightweight, compact design
- Rugged, weatherproof outdoor housing
- M&C Mil-Spec connector to allow for RS485, RS242 and Ethernet
- Protection against frequency sync failure and parameter drift due to temperature change
- Gain Control in 0.1 dB steps
- Quick Delivery

Options

- Various frequency bands
- Output power options from 25 to 400 watts
- Built-in 10 MHz reference signal generator
- 48 VDC (low power) or 110/220 VAC power
- Redundancy - 1:1 or 1:2
- Mounting Brackets

GaN Advantages

- Low Power Consumption
- Higher Power in smaller/lighter package
- Linear Power Output

SPECIFICATIONS

Linear Gain	70 dB Nominal	Output Spurious	-55 dBc max
Gain Control	20 dB nominal in 0.1 dB steps	Spectral Re-growth	-30dBc @Plinear
Gain Stability Over Temp	± 2.0 dB max	Third order IMD (2 equal tones 5MHz apart)	-25 dBc, with 2 equal carriers at 3dB total power back off from rated power (PSat -3dB)
Gain Variation at Fixed Temp	Over Full Band ± 2.0 dB	10MHz Reference	0 dBm ± 5.0 dB
	Over 40 MHz ± 0.5 dB		
Input Impedance	50 Ohms		
Output VSWR	1.50:1		

RF OUTPUT

	PSat	PLin *
25 W	44 dBm	41 dBm
40 W	46 dBm	43 dBm
50 W	47 dBm	44 dBm
60 W	48 dBm	45 dBm
80 W	49 dBm	46 dBm
100 W	50 dBm	47 dBm
125 W	51 dBm	48 dBm
200 W	53 dBm	50 dBm
250 W	54 dBm	51 dBm
400 W	56 dBm	53 dBm
500 W	57 dBm	54 dBm
800 W	59 dBm	56 dBm
1000 W	60 dBm	57 dBm

POWER CONSUMPTION

(at rated power)

175 W
300 W
350 W
400 W
450 W
500 W
500 W
900 W
1000 W
1500 W
1900 W
3500 W
3600 W

POWER REQUIREMENT OPTIONS

110 / 220 VAC or +36 to +72 VDC
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220 VAC
220 VAC
220 VAC
220 VAC

* PLin = max linear power as defined by MIL-STD-188-164C

PHASE NOISE

@ 100 Hz	-63 dBc/Hz
@ 1 KHz	-73 dBc/Hz
@ 10 KHz	-83 dBc/Hz
@ 100 KHz	-93 dBc/Hz
@ 1 MHz	-103 dBc/Hz
@ 10 MHz	-113 dBc/Hz

INTERFACE

RF Output	Waveguide, CPR 137G (Grooved)
IF Input	N-Type Female, 50 Ohms
Connectors	
	DC : MS3102R14S-9P
	AC : MS3102R14S-7P
	M&C: MS3112E1419P
	Redundancy: MS3112E14-15P (Optional)

FREQUENCY BANDS

	Output Frequency	Input Frequency	LO Frequency
Low C	5.725 – 6.425 GHz	975 – 1675 MHz	4.75 GHz
Standard C	5.85 – 6.425 GHz	950 – 1525 MHz	4.90 GHz
Extended C	5.85 – 6.725 GHz	950 – 1825 MHz	4.90 GHz

MECHANICAL

COOLING	FORCED AIR
25W-125W	8.0 x 5.0 x 6.0 in (203 x 127 x 152 mm) 8 lbs (3.65 kg)
200W-250W	7.36 x 7.75 x 12.5 in (187 x 197 x 318 mm) 30 lbs (13.61 kg)
400W-500W	5.48 x 11.75 x 19.25 in (139 x 299 x 489 mm) 58 lbs (26.31 kg)
800W-1000W	7.68 x 16.00 x 22.25 in (195 x 406 x 565 mm) 110 lbs (50.90 kg)

ENVIRONMENTAL

Temperature Range (ambient)

Operating	-40 deg C to + 55 deg C
Humidity	0 to 100% (condensing)
Altitude	10,000 ft ASL

Storage
-40 deg C to + 75 deg



3 Year Warranty

C-BAND_GaN
Specifications are subject to change without notice

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