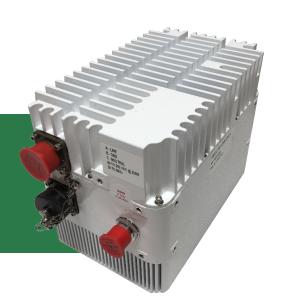
V2 Microwave

Odin Series BUC's

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



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

Gain Control 20 dB nominal in 0.1 dB steps

Gain Stability Over Temp ± 2.0 dB max

Over Full Band **Gain Variation at Fixed Temp**

PLin *

41 dBm

43 dBm

44 dRm

45 dBm

46 dBm

47 dBm

48 dBm

50 dBm

51 dBm

53 dBm

54 dBm

56 dBm

Over 40 MHz ± 0.5 dB

Input Impedance 50 Ohms **Output VSWR** 1.50:1

Output Spurious -55 dBc max -30dBc @Plinear Spectral Re-growth

Third order IMD

(2 equal tones 5MHz apart)

10MHz Reference

-25 dBc, with 2 equal carriers at 3dB total power back off from rated power (PSat -3dB)

RF OUTPUT

25 W

40 W

50 W

60 W

100 W

125 W

200 W

250 W

400 W

500 W

800 W

PSat

44 dBm

46 dBm

47 dBm

48 dBm

49 dBm

50 dBm

51 dBm

53 dBm

54 dBm

56 dBm

57 dBm

± 2.0 dB

er)

59 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
2500 111

3500 W 3600 W

POWER REQUIREMENT OPTIONS

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

110 / 220 VAC 110 / 220 VAC 220 VAC 220 VAC 220 VAC 220 VAC

PHASE NOISE

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

INTERFACE

Waveguide, CPR 137G (Grooved) RF Output **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 950 – 1825 MHz Extended C 5.85 - 6.725 GHz 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)

5.48 x 11.75 x 19.25 in (139 x 299 x 489 mm) 400W-500W

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



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