

V2 Microwave

Ares Series BUC's

Ku-band GaAs BUC's
16W - 200W



Ares 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 technology. 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
- Switchable LO to cover full Ku-band 13.75 - 14.5 GHz
- 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 16 to 200 watts
- Redundancy - 1:1 or 1:2
- Built-in 10 MHz reference signal generator
- 48 VDC (low power) or 110/220 VAC power
- Mounting Brackets

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 Over 40 MHz ± 0.5 dB	10MHz Reference	0 dBm ± 5.0 dB
Input Impedance	50 Ohms		
Output VSWR	1.50:1		

RF OUTPUT

	PSat
16 W	42 dBm
25 W	43 dBm
30 W	44 dBm
60 W	47.8 dBm
100 W	50 dBm
125 W	51 dBm
200 W	53 dBm

POWER CONSUMPTION

(at rated power)
150 W
150 W
225 W
500 W
1000 W
1000 W
1800 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		
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
@ 1 MHz	-103 dBc/Hz
@ 10 MHz	-113 dBc/Hz

INTERFACE

RF Output	Waveguide, WR75G (Grooved)
IF Input	N-Type Female, 50 Ohms
Connectors	
	DC : MS3102R14S-9P
	AC : MS3102R14S-7P - 16w to 30w
	AC : MS3102R16S-10P - 60w to 200w
	M&C: MS3112E1419P
	Redundancy: MS3112E14-15P (Optional)

FREQUENCY BANDS

	Output Frequency	Input Frequency	LO Frequency
Low Ku	12.75 – 13.25 GHz	950 – 1450 MHz	11.80 GHz
Standard Ku	14.00 – 14.50 GHz	950 – 1450 MHz	13.05 GHz
Extended Ku	13.75 – 14.50 GHz	950 – 1700 MHz	12.80 GHz

MECHANICAL

COOLING	FORCED AIR
16W-30W	8.0 x 5.0 x 6.0 in (203 x 127 x 152 mm) 8 lbs (3.65 kg)
60W	7.36 x 7.75 x 12.5 in (187 x 197 x 317 mm) 30 lbs (13.61 kg)
100W-125W	5.48 x 11.75 x 19.25 in (139 x 298 x 489 mm) 58 lbs (26.31 kg)
200W	7.68 x 16 x 22.25 in (195 x 406 x 565 mm) 110 lbs (50 kg)

ENVIRONMENTAL

Temperature Range (ambient)		
Operating	-40 deg C to + 55 deg C	Storage
Humidity	0 to 100% (condensing)	-40 deg C to + 75 deg C
Altitude	10,000 ft ASL	

KU-BAND_GaAs
Specifications are subject to change without notice

3 Year Warranty