



150W to 250W
SSPBMg 3200-G series
AWMA 3200-G series

MIL-STD-188-164 COMPLIANT



Features

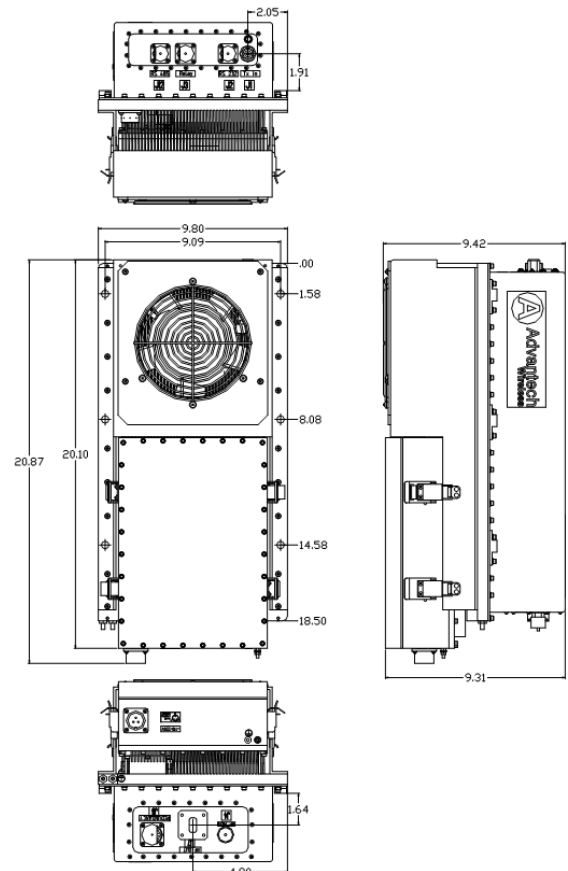
- Full range of output power of 150W, 200W and 250W in a single package
- SSPA or SSPB (BUC) option
- Super High linearity
- Redundant ready with no external controller
- Full M&C capability via RS232, RS485 or Ethernet port
- Built-in Forward precision powering metering
- Output RF calibrated Sample Port
- Redundant Systems shipped fully tested
- Infinite VSWR protection with automatic high reflected power shutdown
- Built-in 70 dB Receive Reject Filter
- Detachable power supply module
- Weatherproof construction
- CE marking

Overview

Based on GaN technology the new G-Series Ku-Band BUCs provide highest possible power density and smallest size on the market. Combined with the traditional Advantech Wireless features, these new series of BUCs and SSPAs provide the ultimate in performance and convenience.

Options

- 1:1 or 1:2 Redundant configuration
- L-Band input (SSPB/BUC operation)
- Internal/External reference with auto-sensing
- Ethernet port



Accessories

- Mounting kits
- External Receive and Transmit Reject Filter
- Remote M&C panel with optional SNMP
- Handheld terminal
- Flexible and rigid waveguides
- Mounting frames
- High power terminations
- Replacement fans

Ku-Band Hubmount SSPB SapphireBlu™ GaN

General Specifications

	150W	200W	250W
Operating Frequency		KS 14.0 – 14.5 GHz KX 13.75 - 14.5 GHz	
L-Band input (BUC)		KS 950 – 1450 MHz KX 950 – 1700 MHz	
Output Power	$P_{SAT}(typical)$ P_{LINEAR}	+52.0 dBm +48.0 dBm	+53.0 dBm +49.0 dBm
			+54.0 dBm +50.0 dBm
Gain	SSPA SSPB (BUC)	PLINEAR is the power at which the IMD=-25 dBc for two CW signals 5 MHz apart and the spectral regrowth is <-30 dBc @ 1.0 x symbol rate for a single QPSK/OQPSK/8PSK signal 62 ± 3 dB, Or optional 72 ± 3 dB 72 ± 3 dB	
Gain adjustment range	20 dB in 0.1 dB steps		
Gain flatness over full band	SSPA 2dB p-p max SSPB (BUC) 4 dB p-p max		
Gain slope over 40 MHz	± 0.3 dB max SSPB (BUC) ± 0.5 dB max		
Gain variation over temperature	± 1.5 dB max		
Input Impedance and VSWR	50 Ω SSPA 1.3:1 SSPB (BUC) 1.4:1		
Output VSWR	1.3:1		
Noise power density	-70 dBm/Hz in Transmit Band, -150 dBm/Hz in Receive Band (10.95 GHz – 12.75 GHz)		
Spurious at P_{LINEAR}	SSPA: -65 dBc max SSPB (BUC): -55 dBc max		
Harmonics	-60 dBc @ P_{LINEAR}		
AM/PM conversion	<1°/dB P_{LINEAR}		
Third order IMD (two tones)	-25 dBc two signal 5 MHz apart at P_{LINEAR}		
Group delay	Ripple 1 nsec p-p max over any 40 MHz band		
Residual AM Noise	0 – 10 kHz -45 dBc 10 kHz – 500 kHz -20 (1.25 + log F) dBc F = Frequency in kHz 500 kHz – 1 MHz -80 dBc		
SSPB (BUC)			
Local Oscillator freq.	KS 13.05 GHz	KX 12.8 GHz	
Internal Reference frequency (optional)	10 MHz	Aging/day ±2 ⁻¹⁰ Aging/year ±5 ⁻⁸ Stability ±2 ⁻⁸ over temp range	
Max Phase Noise	-53 dBc/Hz at 10Hz -69 dBc/Hz at 100Hz -75 dBc/Hz at 1000Hz	-90 dBc/Hz at 10 kHz -105 dBc/Hz at 100 kHz	
External Reference Frequency phase noise (max)	10 MHz -120 dBc/Hz at 10Hz -135 dBc/Hz at 100Hz -150 dBc/Hz at 1000Hz	-155 dBc/Hz at 10 kHz -160 dBc/Hz at 100 kHz	
Weight & Dimensions			
Dimensions	L x W x H 20.1" x 9.8" x 9.31" (510.5x249x236.5 mm)		
Weight	48 lbs (22 kg)		
AC input voltage	90 – 265 VAC (47-63 Hz)		
Power consumption at P Linear	800W	950W	1200W
Interfaces	Input (RF or L-Band) Output Sample Port RS485/Ethernet	N type female N type female MS3112 type	AC line MS3102 type RF output WR75 Cover
Environmental	Temperature	Operating -30°C to +55 °C Storage -55°C to +85 °C	Option 1 -40°C to +55 °C Option 2 -50°C to +65 °C
	Humidity	100% condensing	
	Altitude	10,000' AMSL, de-rated by 2 °C/1000' from AMSL	

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