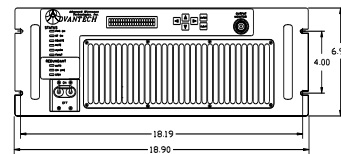
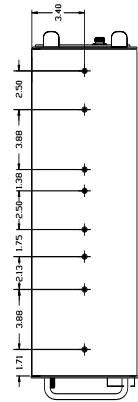
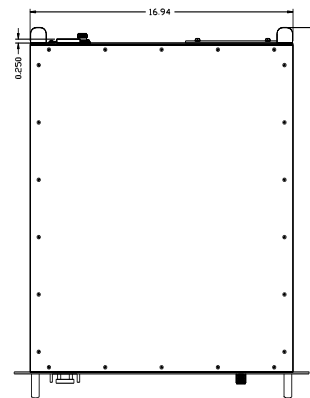
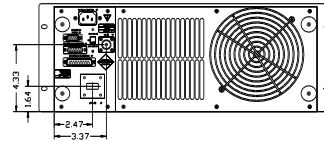




SSPA
SSPB (BUC)

ARMAg-K
ARMUg-K

SG series
SG series



Outline

Features

- Output power of 150W to 250W in a compact single package
- High linearity
- Redundant ready with no external controller
- Full M&C capability via RS232, RS485
- Built-in Forward and Reflected precision power metering
- Output RF calibrated Sample Port
- Redundant Systems shipped fully tested
- Infinite VSWR protection with automatic high reflected power shutdown
- Detachable power supply module
- 19" Rackmount, 4RU, 28" deep
- CE marking

Options

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

Accessories

- Mounting Slides
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides

Overview

The new Super Compact SG Series Ku-Band SSPA/BUCs provide highest power density in the industry. Combined with the traditional Advantech Wireless features, these new series of BUCs provide the ultimate in performance and convenience.

150W to 250W Ku-Band Rackmount SSPA/ SSPB SapphireBlu™ GaN Technology

General Specifications			
Output Power	150W	200W	250W
P_{SAT} (nominal)	+ 52.0 dBm	+53.0 dBm	+54.0 dBm
P_{LINEAR}	+48.0 dBm	+49.0 dBm	+50.0 dBm
Operating Frequency	Ku 14.0 – 14.500 GHz	KX 13.75 – 14.5 GHz	
L-Band input (BUC)	Ku 950 – 1450 MHz	KX 950 – 1700 MHz	
Gain	SSPA 62 +/- 3 dB	SSPB (BUC) 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	-75 dBm/Hz in Transmit Band, -145 dBm/Hz in Receive Band (10.95GHz – 12.75 GHz)		
Spurious at $P_{LINEAR1}$	SSPA: -65 dBc max SSPB (BUC): -55 dBc max		
Harmonics	-50 dBc at P_{LINEAR}		
AM/PM conversion	1°/dB at P_{LINEAR}		
Third order intermod. (two tones)	-25 dBc two signal 5 MHz apart at P_{LINEAR} relative to total power		
Spectral Regrowth	-30 dBc at P_{LINEAR} (for QPSK at 1.5 x symbol rate and OQPSK at 1,0 x symbol rate)		
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.	Ku –13.050 GHz		KX – 12.800 GHz
Internal Reference frequency (optional)	10 MHz	Aging/day ±2 ⁻¹⁰ Aging/year ±5 ⁻⁸ Stability ±2 ⁻⁸ over temp range	
Phase Noise	-53 dBc/Hz at 10 kHz -63 dBc/Hz at 100Hz -73 dBc/Hz at 1000Hz	-83 dBc/Hz at 10 KHz -93 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			
Dimension	19" rackmount 4RU high , 28" deep		
Weight	66 lbs (30kg)		
AC input voltage	90-265 VAC (47 – 63 Hz) PF 0.95 min		
Power consumption (typical)	800W at P_{LINEAR} 1000W at P_{SAT}	950W at P_{LINEAR} 1100W at P_{SAT}	1200W at P_{LINEAR} 1400W at P_{SAT}
Interfaces	Input (RF or L-Band) Output Sample Port RS485/RS232/Ethernet	N type female N type female DB9 / RJ45	AC line IEC 320 Inlet RF output WR75
Environmental	Temperature Humidity Altitude	Operating 0°C to +50 °C Storage -55°C to +85 °C 5% to 95% non condensing 10,000' AMSL, de-rated by 2 °C/1000' from AMSL	

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Ref.: PB-SSPBg-Ku-Rack-150W-250W-13231