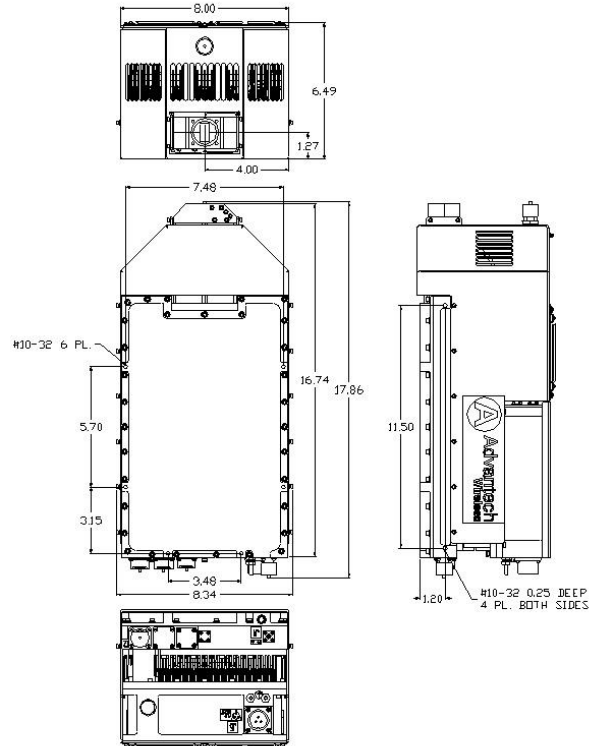




80W / 100W / 125W / 150W
SSPBMg-K 2125-G series



Features

- Output power of 80W to 150W in a single compact package
- High linearity
- Full M&C capability via RS485 and Ethernet port
- Weatherproof construction
- CE marking
- Switchable LO for Ku/Kx Bands
- Redundant Ready

Options

- 1:1 or 1:2 Redundant Configuration
- Internal reference with autosensing
- 70 dB Receive Reject Filter (external)
- Discrete alarm interface

Accessories

- Mounting kits
- External Receive Reject Filter
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides
- Boom mounting kit
- Replacement fans

Overview

Based on GaN technology the new G-Series Ku-Band BUCs provide high power density in a compact size. Combined with the traditional Advantech features, these new series of BUCs provide the ultimate in performance and convenience. The products in the new G-Series Ku-Band BUCs are available as SSPA or SSPB (BUC). The product described in this bulletin is for an 80W to 150W BUC.

80W / 100W / 125W / 150W Ku-Band SSPB GaN

General Specifications		80W	100W	125W	150W
Operating Frequency			KS 14.00 – 14.50 GHz KX 13.75 – 14.50 GHz		
L-Band input (BUC)			KS 950 – 1450 MHz KX 950 – 1700 MHz		
Output Power	P_{SAT} (typical) P_{LINEAR}	+49.0 dBm +45.0 dBm	+50.0 dBm +46.0 dBm*	+51.0 dBm +47.0 dBm*	+52.0 dBm +48.0 dBm*
Gain	SSPB (BUC) SSPA	71 dB min 61 dB min	72 dB min 62 dB min	73 dB min 63 dB min	74 dB min 64 dB min
Gain adjustment range		20 dB in 0.1 dB steps			
Gain flatness over full band		3 dB p-p max for SSPA, 4 dB p-p max for SSPB			
Gain slope over 40 MHz		1 dB p-p max			
Gain variation over temperature		± 1.5 dB max			
Input Impedance and VSWR		50 Ω 1.5:1			
Output VSWR		1.3:1			
Noise power density		-75 dBm/Hz in Transmit Band, -145 dBm/Hz in Receive Band (10.95 GHz – 12.75 GHz)			
Spurious		-55 dBc max at P_{LINEAR}			
AM/PM conversion		<1.0°/dB at P_{LINEAR}			
Third order IMD (two tones)		-25 dBc two signal 5 MHz apart at P_{LINEAR}			
Spectral regrowth		-30 dBc @ P_{LINEAR}			
Group delay		Ripple 1 nsec p-p max			
Local Oscillator freq.		KS 13.05 GHz KX 12.8 GHz			
Phase Noise		-53 dBc/Hz at 10Hz -83 dBc/Hz at 10 kHz -63 dBc/Hz at 100Hz -95 dBc/Hz at 100 kHz -73 dBc/Hz at 1000Hz			
External Reference Frequency		10 MHz Optional; Internal 10MHz auto-sensing reference			
Phase noise (max)		-120 dBc/Hz at 10Hz -155 dBc/Hz at 10 kHz -135 dBc/Hz at 100Hz -160 dBc/Hz at 100 kHz -150 dBc/Hz at 1000Hz			
Weight & Dimensions					
Dimensions (L x W x H)		17.86" x 8.34" x 6.49" in (453.6 x 211.8 x 164.8 mm)			
Weight		22.05 lbs. (10.5 kg)			
Input voltage		AC 90 – 265 VAC (47 – 63 Hz)			
Power consumption (nominal)	P_{sat} P_{linear}	840W 610W	850W 620W	900W 625W	1100W 690W
Interfaces		Input (L-Band) DC line RS485 and Ethernet	N type female MS3102 type MS3112 type	RF output AC line	WR75 Grooved MS3102 type
Environmental		Temperature Operating: -30°C to +55 °C Option: -40°C to +55 °C Storage: -55°C to +85 °C Humidity 100% condensing Altitude 10,000' AMSL, de-rated by 2 °C/1000' from AMSL			
		*Note: For Kx-Band Plinear is Typical			

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