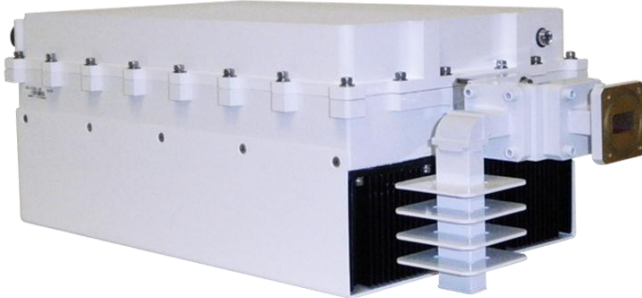




60W / 80W / 100W / 125W
SSPBMg-K 2125-G series



Features

- Output power of 60W to 125W in a single compact package
- High linearity
- Full M&C capability via RS485 or Ethernet port
- Weatherproof construction
- CE marking

Options

- Ethernet port
- Internal reference with autosensing
- Waveguide Output Isolator
- 70 dB Receive Reject Filter (external)
- Redundant ready
- 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 a 60W to 125W BUC.

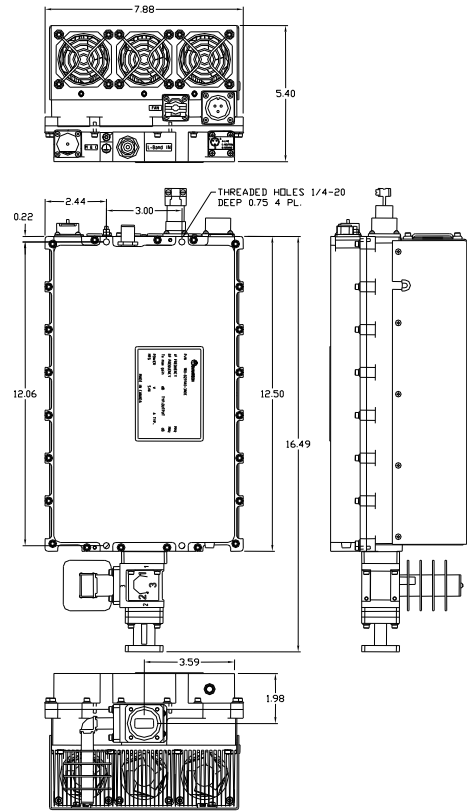


Figure 1: 125 W BUC (AC operation)

60W / 80W / 100W / 125W Ku-Band SSPB GaN

General Specifications		60W	80W	100W	125W
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)	+48.0 dBm	+49.0 dBm	+50.0 dBm	+51.0 dBm
	P_{LINEAR}	+44.0 dBm	+45.0 dBm	+46.0 dBm	+47.0 dBm
Gain	SSPB (BUC) SSPA	P_{LINEAR} 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.			
		70 ± 3 dB 60 ± 3 dB			
Gain adjustment range		20 dB in 0.1 dB steps			
Gain flatness over full band		4 dB p-p max			
Gain slope over 40 MHz		1dB p-p dB max			
Gain variation over temperature		± 1.5 dB max			
Input Impedance and VSWR		50 Ω 1.3:1			
Output VSWR		2:1 (1.25:1 with optional Output Isolator)			
Noise power density		-80 dBm/Hz in Transmit Band, -150 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) With isolator	12..1"x7.9"x5.4" (307x200x137 mm) 16.5"x7.9"x5.20" (419x200x132mm)			
Weight		21.1 lbs. (9.6 kg)			
Input voltage		DC 48V (40v – 60V) AC 90 – 265 VAC (47 – 63 Hz)			
Power consumption (nominal)		500W@Psat, 420W@ P_{LINEAR} 1		550W@Psat, 470W@ P_{LINEAR} 1	
Interfaces		Input (L-Band) N type female RF output DC line MS3102 type AC line MS3102 type		WR75 Grooved	
		MS3112 type RS485/Ethernet (optional)		RS485/RS232 or Ethernet (optional)	
Environmental		Temperature Operating -30°C to +55 °C Option 1 -40°C to +60 °C Option 2 -50°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			

NORTH AMERICA
USA
Tel: +1 703 659 9796
Fax: +1 703 635 2212
info.usa@advantechwireless.com

CANADA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.canada@advantechwireless.com

EUROPE
UNITED KINGDOM
Tel: +44 1480 357 600
Fax: +44 1480 357 601
info.uk@advantechwireless.com

RUSSIA & CIS
Tel: +7 495 971 59 18
info.russia@advantechwireless.com

INDIA
Tel: +91 33 2415 5922
info.india@advantechwireless.com

SOUTH AMERICA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.latam@advantechwireless.com

BRAZIL
Tel: +55 11 3054 5701
Fax: +55 11 3054 5701
info.brazil@advantechwireless.com

An ISO 9001 : 2008 Company



Ref.: PB-SSPBg-KU-60-80-100-125-14203