



SSPB (BUC) SSPBM-X 2200-G series



Features

- Output power of up to 400W in a single package
- High linearity
- Full M&C capability via RS485 or Ethernet port
- Weatherproof construction
- CE marking

Overview

Based on GaN technology the new G-Series X-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 X-Band BUCs are available as SSPA or SSPB (BUC).

Options

- Ethernet port
- Waveguide Output Isolator
- 70 dB Receive Reject Filter (external)
- Harmonic filter (external)

Accessories

- Mounting kits
- External Receive Reject Filter
- External Transmit Reject Filter (for RX path)
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides
- Mounting frames
- High power terminations
- Replacement fans

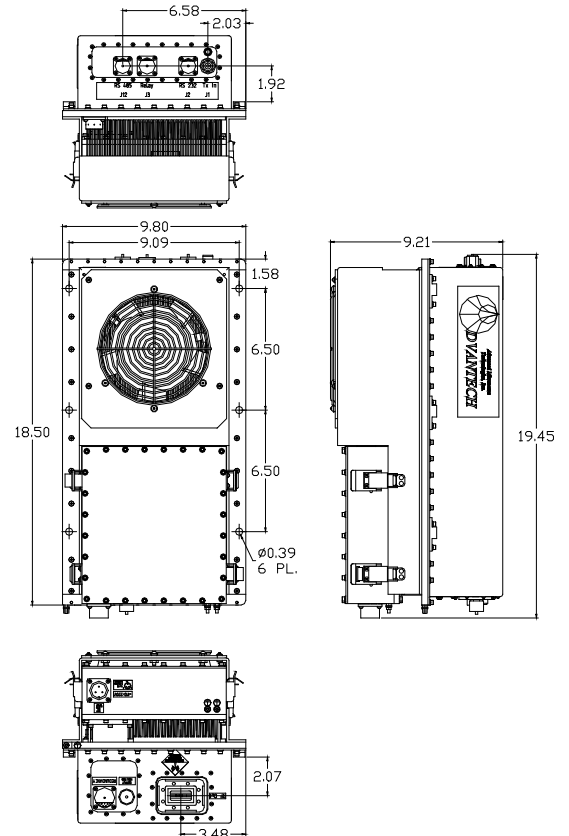


Figure 1: 300/400 W

300W/400W X-Band BUC SSPA/SSPB GaN Technology

General Specifications		300W	400W
Operating Frequency	7.9 – 8.4 GHz		
L-Band input (BUC)	950 – 1450 MHz		
Output Power	P_{SAT} +55 dBm min $P_{LINEAR\ 1}$ +51.5 dBm $P_{LINEAR\ 2}$ +52.5 dBm	P_{SAT} +56 dBm min $P_{LINEAR\ 1}$ +52.5 dBm $P_{LINEAR\ 2}$ +53.5 dBm	
Gain	74dB ± 3 dB		
Gain adjustment range	20 dB in 0.1 dB steps		
Gain flatness over full band	3 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	1.25:1 with optional Output Isolator		
Noise power density	-75 dBm/Hz in Transmit Band, -110 dBm/Hz in Receive Band (7.25 – 7.75 GHz) -145 dBm/Hz with optional external Receive Reject Filter		
Spurious	-55 dBc max at $P_{LINEAR\ 1}$		
Harmonics	-40 dBc @ $P_{LINEAR\ 2}$		
AM/PM conversion	2.5°/dB at $P_{LINEAR\ 2}$		
Third order intermod (two tones)	-25 dBc two signal 5 MHz apart at $P_{LINEAR\ 1}$		
Spectral regrowth	30 dBc @ $P_{LINEAR\ 2}$		
Group delay	Ripple 1 nsec p-p max		
Local Oscillator freq.	6.95 GHz		
Phase Noise	-53 dBc/Hz at 10Hz -63 dBc/Hz at 100Hz -73 dBc/Hz at 1000Hz	-83 dBc/Hz at 10 kHz -95 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 W xH)	18.5" x 9.8" x 9.56" (470x255x243 mm)		
Weight	44 lbs (20 kg)		
Input voltage	AC 90 – 265 VAC (47 – 63 Hz)		
Power consumption (nominal)	1600W @ P_{SAT} , 1400W @ $P_{LINEAR\ 1}$		1900W @ P_{SAT} , 1700W @ $P_{LINEAR\ 1}$
Interfaces:	RF input Type N (F) RF output CPR-112G Relay port MS3112E12-10P AC Line MS3102R16-10P	Redundancy MS3112E16-26P RS-232 MS3112E10-6P RS-485 MS3112E10-6P	
Environmental	Temperature Operating -30°C to +55 °C Storage -55°C to +85 °C Humidity 100% condensing Altitude 10,000' AMSL, derated by 2 °C/1000' from AMSL	Option 1 -40°C to +55 °C	

$P_{LINEAR\ 1}$ is the power at which the IMD specs are met

$P_{LINEAR\ 2}$ is the power at which the spectral regrowth is <-30 dBc @ 1.0 x symbol rate for QPSK/OQPSK/8PSK modulation

NORTH AMERICA
USA
Tel: +1 678 889-1831
Fax: +1 678 889-1756
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

SOUTH AMERICA
USA
Tel: +1 678 889-1831
Fax: +1 678 889-1756
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-SSPB-M-X-300-400-12106