



50W
SSPB110X series

Features

- Output power of 50W in a single compact package
- High linearity
- Full M&C capability via RS485 or Ethernet port
- Weatherproof construction
- MIL-STD-188-164A latest revision compliant

Overview

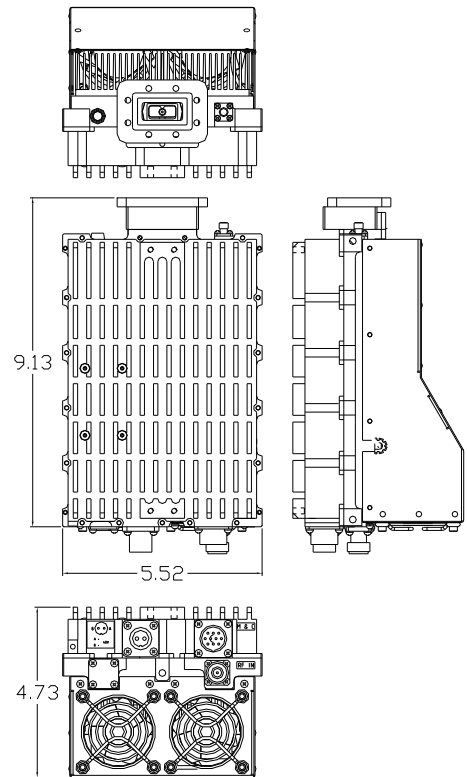
Based on Solid State technology the new series light weight X-Band BUCs provide high power density in a compact size. Combined with the traditional Advantech features, these new series of BUCs provide the ultimate in performance and convenience. The products in the new Light Weight-Series X-Band BUCs are available as SSPA or SSPB (BUC). The product described in this bulletin is for a 50W BUC.

Options

- Ethernet port
- Internal reference *with* auto-sensing
- Waveguide Output Isolator

Accessories

- Mounting kits
- External Receive Reject Filter (70 dB)
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides
- Boom mounting kit
- Replacement fans



EXTRA-Lightweight

50W X-Band SSPB

General Specifications		50W	
Operating Frequency	7.9 – 8.4 GHz		
L-Band input (BUC)	950 – 1450 MHz		
Output Power	P _{SAT} +47.0 dBm (typical) P1 dB = +46.0 dBm		
Gain	SSPB (BUC)	67 dB min	
	SSPA	57 dB min	
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	1 dB 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 (with optional Output Isolator) 1.25:1		
Noise power density	-80 dBm/Hz in Transmit Band, -110 dBm/Hz in Receive Band (7.25GHz – 7.75 GHz)		
Spurious	-55 dBc max at P1 dB		
AM/PM conversion	<1.0°/dB at 3dB Back off		
Third Order Intermodulation	-25 dBc @ P1, reference to two equal carriers, 5 MHz apart		
Group delay	Ripple 1 nsec p-p max		
Local Oscillator freq.	6.95 GHz		
Phase Noise	-55 dBc/Hz at 10Hz -83 dBc/Hz at 10 kHz -63 dBc/Hz at 100Hz -93dBc/Hz at 100 kHz -73 dBc/Hz at 1000Hz -110 dBc/Hz at 1 MHz		
External Reference Frequency	10 MHz Optional; Internal 10MHz 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 9.13"x5.52"x4.73" (232x140x120 mm)		
Weight	8 lbs. (3.6 kg)		
Input voltage	DC 48V (40v – 60V)		
Power consumption (nominal)	250W @ P1 dB		
Interfaces	Input (L-Band) N type female RF output CPR112 Grooved DC line MS3102 type AC line MS3102 type MS3112 type RS485/Ethernet (optional)		
Environmental	Temperature Operating -30°C to +55 °C Option 1 -40°C to +55 °C Option 2 -50°C to +50 °C Storage -55°C to +85 °C Humidity 100% condensing Altitude 10,000' AMSL, de-rated by 2 °C/1000' from AMSL		RS485/RS232 or Ethernet (optional)

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-SSPB-X-50-13150