



SSPA AWMAg-C TT series
SSPB (BUC) SSPBMg-C TT series



Features

- Full range of 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 or optional Ethernet port
- Built-in Forward precision powering metering
- Output RF calibrated Sample Port
- Redundant Systems shipped fully tested
- Infinite VSWR protection with automatic high reflected power shutdown
- Detachable power supply module
- Weatherproof construction
- CE marking

Options

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

Accessories

- Mounting kits
- Remote M&C panel with optional SNMP
- Handheld terminal
- Flexible and rigid waveguides
- Mounting frames
- High power terminations
- External Harmonics reject filter (-65dBc)

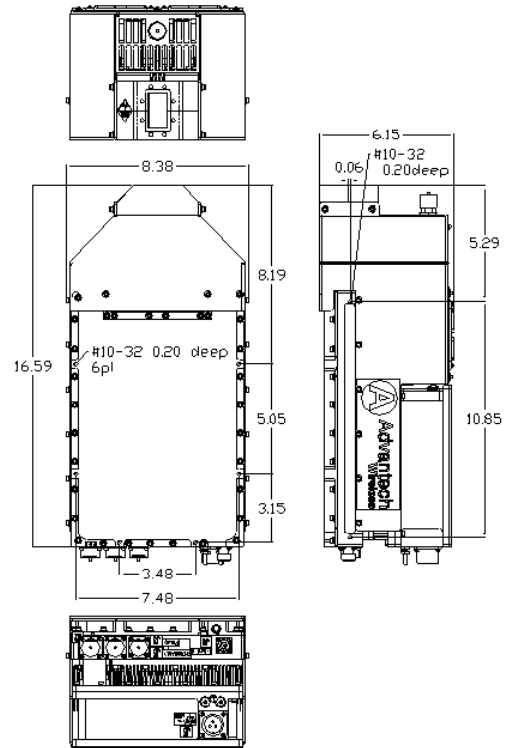


Figure 1: 200W Outline

Overview

The new Super Compact TT-Series C-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, reliability, and convenience.

Technical specifications

	150W	200W	250W
Output Power			
P _{SAT} (typ.)	+52.0 dBm	+53.0 dBm	+54.0 dBm
P _{LINEAR} is the maximum combined transmit power of two equal amplitude continuous wave (CW) carriers 5MHz apart, when the third order intermodulation product power is -25dB relative to the combined power of the two CW carriers.	+49.0 dBm	+50.0 dBm	+51.0 dBm
Operating Frequency	5.85 – 6.425 GHz / optional 5.85 - 6.725 GHz		
L-Band input (BUC)	950 – 1525 MHz / 950 - 1825 MHz		
Gain	75dB min (for SSPB) 65dB min (for SSPA)		
Gain adjustment range	20 dB in 0.1 dB steps		
Gain flatness over full band	3.0 dB over 500MHz for SSPA, 4 dB over 500 MHz p-p max for SSPB (BUC)		
Gain slope over 40 MHz	± 0.5 dB 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, -135 dBm/Hz in Receive Band (3.4GHz – 4.2 GHz)		
Spurious at P _{LINEAR}	-55 dBc max		
Harmonics	- 35 dBc at P _{LINEAR}		
AM/PM conversion	1.0°/dB at P _{LINEAR}		
Group delay	Ripple 1 nsec p-p max over any 40 MHz band		
SSPB (BUC)			
Local Oscillator freq.	4.9 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 10Hz -70 dBc/Hz at 100Hz -80 dBc/Hz at 1000Hz	-90 dBc/Hz at 10 kHz -100 dBc/Hz at 100 kHz	
External Reference	10 MHz	-155 dBc/Hz at 10 kHz	
Frequency phase noise (max)	-120 dBc/Hz at 10Hz -135 dBc/Hz at 100Hz -150 dBc/Hz at 1000Hz	-160 dBc/Hz at 100 kHz	
Weight & Dimensions			
Dimensions (L x W x H)	16.6" x 8.4" x 6.15" (422 x 213 x 156 mm)		
Weight	24.2 lbs. (11 kg)		
AC input voltage	90 to 264 V AC (47 – 63 Hz) Power Factor 0.95 min.		
Power consumption (nominal)	700W at P _{LINEAR} 850W at P _{SAT}		
Interfaces	Input (RF or L-Band) Output Sample Port RS485/RS232 and Ethernet (optional)	N type female N type female MS3112 type	AC line MS3102 type RF output CPR137
Environmental	Temperature	Operating -30°C to +55 °C Optional -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	

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