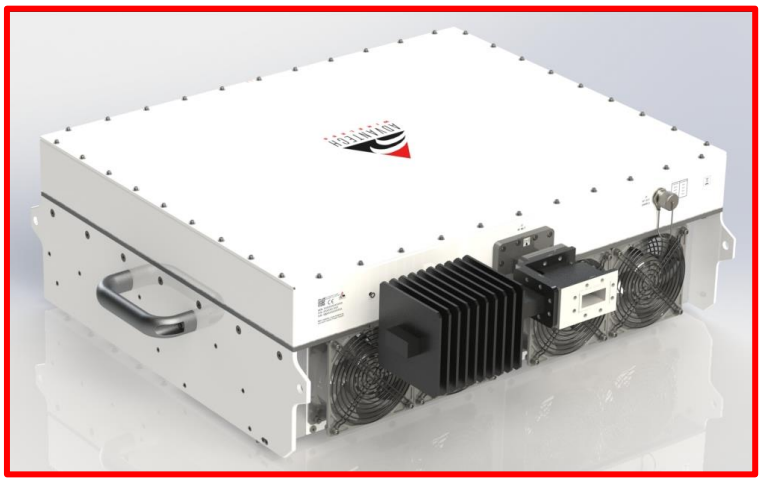
ADVANTECH WIRELESS
A Baylin Technologies Company

500W
C-Band GaAs SSPA/SSPB

The new **Genesis-Series** of C-band SSPA/SSPBs from Advantech Wireless Technologies epitomizes the latest in hardware and software technologies, making it the most feature-rich satcom SSPA in the industry. Available in 500W C-band, the Genesis-Series SSPA/SSPB delivers the high-end features discriminating users have come to expect.



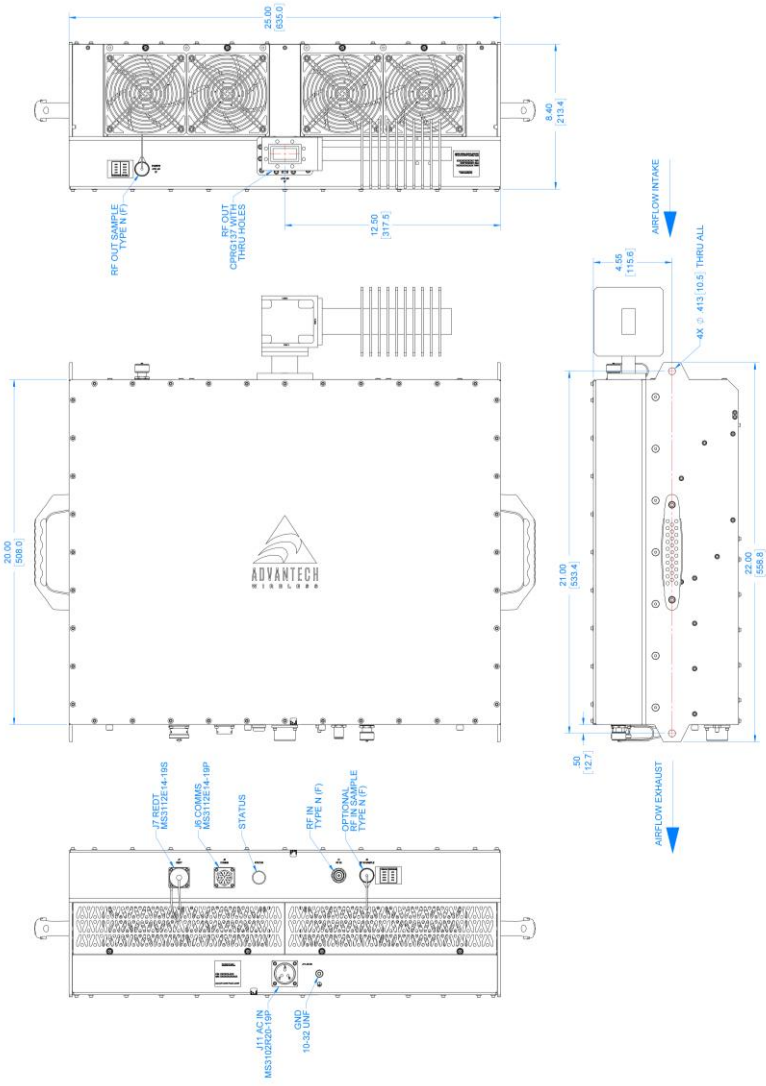
500W C-Band SSPB

Features

- 500W in a single package
- SSPA or SSPB option
- Soft-fail ready
- Internal/External reference with autosense
- Redundant ready with no external controller
- Full featured embedded web server
- Secure SNMPv3 interface (10/100 Ethernet)
- Serial Protocol over RS232/RS485/UDP
- Discrete Alarm Interface
- Status LED indicator
- Forward power monitoring
- True RMS power detection
- Calibrated Output RF sample port
- Field replaceable fan assembly
- Weatherproof construction
- 20dB gain adjustment (minimum)

Options

- 1:1, 1:2, N+1 redundant configurations
- Calibrated Input RF sample port



CE (EN 61000-4, EN 61000-3, EN 55011, EN 61010-1)

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General Specifications	
500W	
SSPA	
Operating Frequency	Standard: 5.85 - 6.425 GHz Extended: 5.85 - 6.725 GHz
Output Power P1db	+56dBm
Gain (with 0dB attenuation)	75 dB
Gain adjustment range	20 dB in 0.1 dB steps
Gain flatness over full band	2dB p-p max (SSPA only)
Gain slope over 40 MHz	± 0.3 dB max (SSPA only)
Gain variation over temperature	± 1.5 dB max
Input Impedance and VSWR	50 Ω 1.3:1 (SSPA only)
Output VSWR	1.3:1
Signal Related Spurious at P1db	-65 dBc max (SSPA only)
Harmonics	-50 dBc @ Rated P1db-3
AM/PM conversion	<1°/dB @ Rated P1db-3 <3.5°/dB @ Rated P1db
Third order IMD (two tones)	-25 dBc two signal 5 MHz apart at Rated P1db-3
Group delay	Ripple 1 nsec p-p max over any 40 MHz band
SSPB (BUC)	
L-Band input (BUC)	Standard: 950-1525 MHz Extended: 950 - 1825 MHz
Gain flatness over full band	4dB p-p max (SSPB only)
Gain slope over 40 MHz	± 0.5 dB max (SSPB only)
Input Impedance and VSWR	50 Ω 1.5:1 (SSPB only)
Signal Related Spurious at P1dB	-55 dBc max (SSPB only)
Local Oscillator freq.	4.9 GHz
Internal Reference frequency	Aging/day: ±1 x 10^{-9} Aging/year: ±10 x 10^{-8} Stability: ±1 x 10^{-7} over temp range
Max Phase Noise	-37 dBc/Hz at 10Hz -77 dBc/Hz at 1 kHz -97 dBc/Hz at 100 kHz -67 dBc/Hz at 100Hz -87 dBc/Hz at 10 kHz -107 dBc/Hz at 1 MHz
External Reference Input Power Frequency phase noise (max)	10 MHz -5dBm to +5dBm -120 dBc/Hz at 10Hz -155 dBc/Hz at 1 kHz -165 dBc/Hz at 100 kHz -140 dBc/Hz at 100Hz -160 dBc/Hz at 10 kHz

Mechanical, Environmental, Power	
Dimensions	L x W x H: 20" x 25" x 8.4" (508 x 635 x 213.36 mm)
Weight	99 lbs. (44.9 kg)
AC input voltage	190 – 265 VAC (47-63 Hz) 0.95 Power Factor @ 220VAC
Power consumption at P1dB	3000W
Interfaces	Input (RF or L-Band): N type female AC line: MS3102 type (See outline for details) Output Sample Port: N type female RF output: CPRG137 Interface Port: MS3112 type (See outline for details)
Environmental	IP65 Compliance Temperature: Operating: -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: specifications subject to change without notice.

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