125W/150W/200W/250W/300W Ku-Band GaN SSPA/SSPB

The new **Genesis-Series** of Ku-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 125W, 150W, 200W, 250W and 300W Ku-band variants, the Genesis-Series SSPA/SSPB delivers the high-end features discriminating users have come to expect.

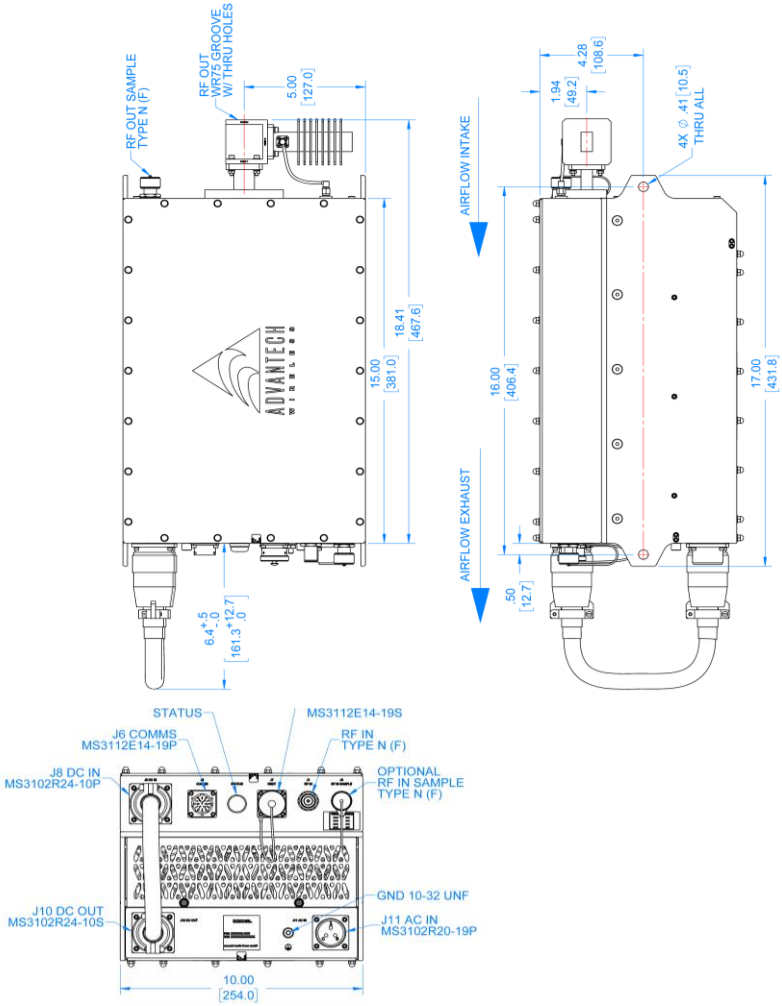
300W Ku-Band SSPB

Features

- 125W, 150W, 200W, 250W, 300W in a single package
- SSPA or SSPB option
- Soft-fail ready
- Internal/External reference with autosense
- Field replaceable power supply module
- 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 and Reflected 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)

ADVANTECH WIRELESS
A Baylin Technologies Company

125W/150W/200W/250W/300W Ku-Band GaN SSPA/SSPB

General Specifications					
	125W	**150W**	**200W**	**250W**	**300W**
SSPA					
Operating Frequency	Standard: 14.0 – 14.5 GHz Extended: 13.75 – 14.5 GHz				
Output Power P_{LINEAR}	+48dBm	+48.7dBm	+50dBm	+51dBm	+51.7 dBm
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 tested with a single QPSK, 2MS/s SR, 0.35 roll-off					
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 $P_{LINEAR\ 1}$	-65 dBc max (SSPA only)				
Harmonics	-50 dBc @ P_{LINEAR}				
AM/PM conversion	<1°/dB P_{LINEAR}				
Third order IMD (two tones)	-25 dBc two signal 5 MHz apart at P_{LINEAR}				
Group delay	Ripple 1 nsec p-p max over any 40 MHz band				
SSPB (BUC)					
L-Band input (BUC)	Standard: 950 – 1450 MHz Extended: 950 – 1700 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 $P_{LINEAR\ 1}$	-55 dBc max (SSPB only)				
Local Oscillator freq	Standard: 13.05 GHz Extended: 12.8 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: 18.4" x 10" x 8.1" (467x254x206 mm)				
Weight	44.5 lbs. (20 kg)				
AC input voltage	90 – 265 VAC (47-63 Hz) 0.95 Power Factor @ 220VAC				
Power consumption at P_{Linear}	800W	850W	1500W	1600W	1700W
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: WR75 Cover with Groove 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.

Scan this QR code to locate The Advantech Wireless Sales office closest to you:

info@advantechwireless.com