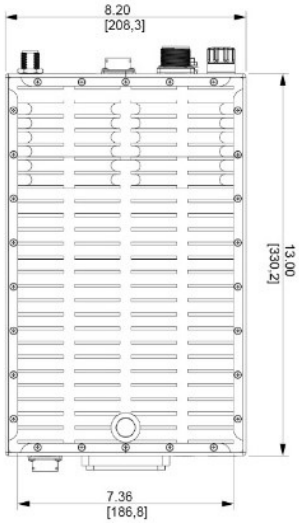
Denali-Line

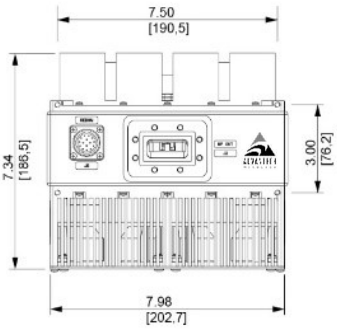
X-Band GaN SSPA BUC

Overview

An ideal solution for both mobile and fixed Communication terminals. The Denali-Line SSPAs / BUCs are designed for high efficiency resulting in an optimal compact form factor with high performance and reliability. With the advanced customer interface and HTTP embedded web page, the operator is able to monitor and control the BUC and the System Redundancy.

- X-Band: 200W





Features

- Highest power density in the industry
- Up to 1000W of Saturated RF Output Power
- Up to 400W of RF Linear power
- Designed to comply with the Mil-STD-461 and Mil-STD-810G
- Built-in monitoring of critical parameters such as: RF power detection, mute control, over temperature shutdown, summary alarm
- M&C Interfaces included: RS485, RS232, Ethernet and dry-contacts
- WEB interface and SNMP monitoring
- 1:1 and 1:2 built-in Redundant Ready to eliminate external controller

Options:

- Internal/External reference with auto-sensing
- Remote control unit
- External X-Band Tx and Rx band-pass and band-reject filters to comply with X-Band Certification Test

Denali-Line GaN SSPA BUC

Technical Specifications

X-Band					
Electrical Characteristics	**200W**				
RF Output at P Sat	53 dBm				
RF Output at P Lin	49 dBm				
Output Frequency Range	Standard X-band: 7.9 – 8.4 GHz/XL-band: 7.145 to 7.250 GHz				
Input Frequency Range (BUC)	Standard X-band: 950 – 1450 MHz/ XL-band: 965-1070 MHz				
Local Oscillator Frequency	Standard X-band: 6.95 GHz/ XL-band: 6.180 GHz				
Linear Gain	70 dB min.				
Gain Flatness	3dB p-p max.				
Gain Stability Over Temperature	± 1.5 dB max				
User Adjustable Gain	20 dB in 0.5 dB steps				

Spectral Re-growth	-30dBc @PLinear, (at 1 x Symbol Rate, QPSK, 8PSK, alpha=0.35)				
Third order IMD (2 equal tones 5MHz apart)	- 25dBc at Plin (MIL-STD-188-164B)				
10MHz Reference	0dBm ± 5.0 dB - External via IF / (Internal 10MHz reference optional)				
	@ 100 Hz	**@ 1 KHz**	**@ 10 KHz**	**@ 100 KHz**	**@ 1 MHz**
Ref Phase Noise Requirement		-140 dBc/Hz max	-150 dBc/Hz max	-155 dBc/Hz max	
Local Oscillator Phase Noise	-63 dBc/Hz max	-73 dBc/Hz max	-83 dBc/Hz max	-93 dBc/Hz max	-103 dBc/Hz max
Output Spurious	-60dBc max @PLinear				
Harmonics	-50dBc max @PLinear				
AM/PM	< 2deg/dB at PLin				
VSWR	Input (1:50:1) Output (1.30:1)				

Power consumption			
X-Band	**200W**		
Power consumption (Watts)	1000W		
Power requirement	110-220 VAC		
Interface			
Output Interface	Waveguide, CPR 112G (Grooved)		
Input Interface	N-Type Female, 50 Ohms		
Connectors	AC Connector: MS3102R16-10P	M&C: MS3112E14-19P	Redundancy: MS3112E14-15P
Mechanical			
Cooling	Forced Air		
Dimensions (L x W x H)	13 x 8.2 x 6.3 in / 33.02 x 20.83 x 16 cm		
Weight	27.8 lbs / 12.5 kg		
Environmental			
	Temperature Range (ambient)	**Humidity**	**Altitude**
	-40°C to + 55°C (operating) -40°C to + 75°C (storage)	0 to 100% (condensing)	10,000 ft ASL

Ref.: PB-AWT-DMLg-X-25066

NORTH AMERICA

USA
info.usa@advantechwireless.com

CANADA
Info.canada@advantechwireless.com

EUROPE

UNITED KINGDOM
info.uk@advantechwireless.com

SOUTH AMERICA

info.latam@advantechwireless.com

BRAZIL
info.brazil@advantechwireless.com

ASIA

info.asia@advantechwireless.com

INDIA
info.india@advantechwireless.com