

Denali-Line

Ku-Band GaN SSPA BUC

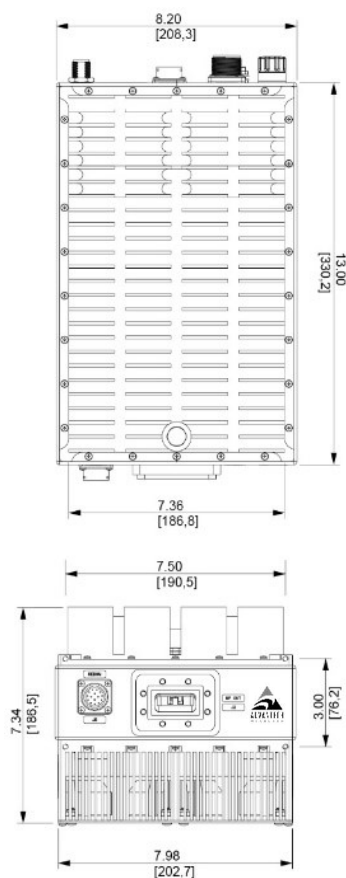
Overview

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.

- Ku-Band: 80W / 100W / 125W

Features

- Compact size
- Built-in monitoring of critical parameters such as: RF power detection, mute control, over temperature shutdown, summary alarm
- IP55 rated housing and fan (weather proof construction)
- M&C Interfaces included: RS485, RS232, Ethernet and dry-contacts
- WEB interface and SNMP monitoring
- 1:1 and 1:2 Redundant Ready built into the BUC eliminating external controller
- Ku-Band: Optional Dual LO (Switchable). covers both regular and ext. Ku-Band
- Optional Internal/External reference with auto-sensing
- Optional Remote control unit



Denali-Line Ku-band GaN SSPA BUC

Technical Specifications					
Ku-Band					
Electrical Characteristics	80W	100W	125W		
RF Output at P Sat (typical)	49 dBm	50 dBm	51 dBm		
RF Output at P Lin (min)	45 dBm	46 dBm	47 dBm		
Output Frequency Range	Low Ku Band: 12.75 – 13.25 GHz	Standard Ku: 14.00 – 14.50 GHz	Extended Ku: 13.75 – 14.50 GHz		
Input Frequency Range (BUC)	Low Ku Band: 950 – 1450 MHz	Standard Ku: 950 – 1450 MHz	Extended Ku: 950 – 1700 MHz		
Input Frequency Range (SSPA)	Low Ku Band: 12.75 – 13.25 GHz	Standard Ku: 14.00 – 14.50 GHz	Extended Ku: 13.75 – 14.50 GHz		
Local Oscillator Frequency	Low Ku Band: 11.80 GHz	Standard Ku: 13.05 GHz	Extended Ku: 12.80 GHz		
Gain Stability Over Temp.	Low Ku Band: ± 1.5 dB nominal; ± 2.25 dB max Standard Band: ± 1.5 dB nominal; ± 2.0 dB max Extended Band: ± 1.5 dB nominal; ± 2.25 dB max				
Gain Variation at fixed temp	Low Ku Band: ± 0.75 dB max over any 40 MHz; ± 2.25 dB over full band Standard Band: ± 0.5 dB max over any 40 MHz; ± 2.0 dB over full band Extended Band: ± 0.75 dB max over any 40 MHz; ± 2.25 dB over full band				
Linear Gain	70 dB min.				
User Adjustable Gain	20 dB nominal in 0.5 dB steps				
Spectral Re-growth	-30dBc @PLinear				
Third order IMD (2 equal tones 5MHz apart)	-25 dBc at Plinear				
10MHz Reference	0dBm ± 5.0 dB - External via IF / (10MHz reference with Auto-sensing 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	-55dBc max @PLinear				
Harmonics	-50dBc max @PLinear				
VSWR	Input (1:50:1) Output (1.30:1)				
Power consumption					
	80W	100W	125W		
Power consumption (Watts)	750W	780W	800W		
Power requirement	110-220 VAC				
Interface					
Output Interface	Ku-Band: Waveguide, WR75G (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)	Ku-Band: 12.8 x 8.2 x 7.1 / 32.5 x 20.8 x 18.0				
Weight	27.8 / 12.5				
Environmental					
	Temperature Range (ambient)		Humidity		Altitude
	-40°C to + 55°C (operating)		0 to 100% (condensing)		10,000 ft ASL
	-40°C to + 75°C (storage)				

*PLinear 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.

Ref.: PB-AWT-DLg-Ku-23011

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