

800W X-Band GaN SSPA BUC Rack-mount

Overview

Designed for use primarily in satellite communications applications. These units are characterized by high linearity and high power efficiency, as well as excellent thermal efficiency and dependability over the full operating temperature range.

X-Band GaN: 800W

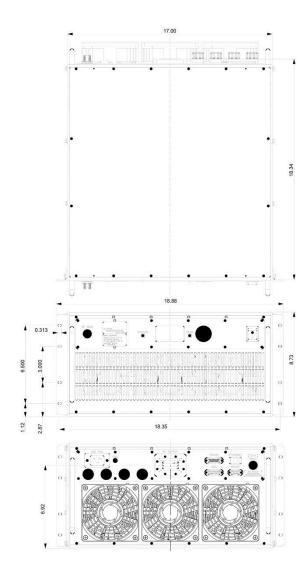
Features

- Redundancy ready
- Light weight and compact highest power density on the market
- High thermal dissipation efficiency
- Over temperature shutdown
- High Mean Time Before Failure (MTBF over 100K hours)
- Monitor & Control Interface
- Serial and Analog M&C
- Internet web page interface
- Alarms: Voltage/Current/Temperature/Summary
- Control: Mute/Gain
- RF power detection

Options

- Frequency range options available
- 1:1 and 1:2 Redundancy Systems
- Extended Warranty
- BUC: BUILT IN with or without internal 10 MHz ref







Technical Specifications

800W X-Band GaN SSPA BUC Rack-mount

		X-Band					
Electrical Characteristics	800W						
RF Output at P Sat (Typ.)	59 dBm						
RF Output at P Lin	56 dBm						
Output Frequency Range	7.9 – 8.4 GHz						
Input Frequency Range	950 – 1450 MHz						
Local Oscillator Frequency	6.95 GHz						
Gain Stability Over Temperature	± 1.5 dB						
Gain Variation at fixed temperature	± 0.5 dB over max over 40 MHz; ± 2.0 dB over full band						
Linear Gain	75 dB min.						
User Adjustable Gain	20 dB in 0.5 dB steps						
Technical Specifications							
		X Band					
Spectral Re-growth	-30dBc @PLinear						
Third order IMD (2 equal tones 5MHz apart)	-25 dBc, with 2 equal carriers at P Lin.						
10MHz Reference	$0dBm \pm 5.0 dB - External via IF / (Internal 10MHz reference optional)$						
	@ 100 Hz	@ 1 KHz		@ 10 KHz	@ 100 KHz	@ 1 MHz	
Ref Phase Noise Requirement		-140 dBc/Hz i		-150 dBc/Hz max	-155 dBc/Hz max		
Local Oscillator Phase Noise	-63 dBc/Hz max	-73 dBc/Hz r		-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 X-Band			_	800W			
Power consumption (at rated power) AC version	3750W						
Power requirement	220 VAC						
Interface	ZZU VAC						
Output Interface	X-Band: Waveguide, CPR 112G (Grooved)						
Input Interface		N-Type Female, 50 Ohms					
Connectors	AC: EC320-C20	AC: EC320-C20					
Mechanical							

Temperature Range (ambient)

-40°C to + 55°C (operating) -40°C to + 75°C (storage)

Ref.: PB-AWT-Rack-5RU-GaN-22205

10,000 ft ASL

NORTH AMERICA

Dimensions (L x W x H)

Environmental

Weight

USA

info.usa@advantechwireless.com

CANADA

Info.canada@advantechwireless.com

EUROPE

UNITED KINGDOM info.uk@advantechwireless.com SOUTH AMERICA

info.latam@advantechwireless.com

5 RU

82Lb / 37kg

Humidity

0 to 100% (condensing)

BRAZIL

info.brazil@advantechwireless.com

ASIA

info.asia@advantechwireless.com

INDIA

info.india@advantechwireless.com