

## 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.

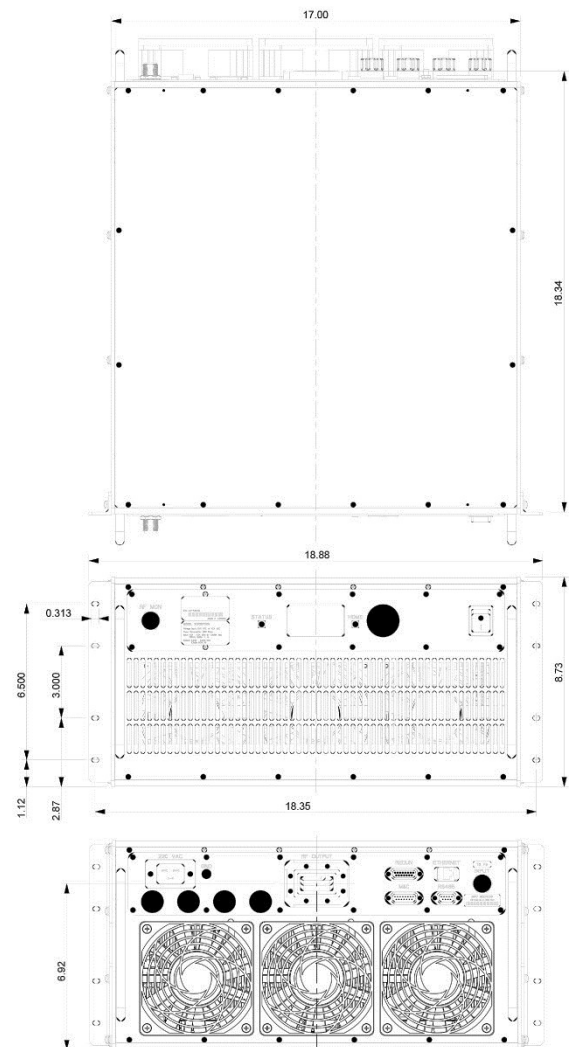
- X-Band GaN: 800W

### 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





## 800W X-Band GaN SSPA BUC Rack-mount

Technical Specifications					
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 at P Lin. (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	-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					
Output Interface	X-Band: Waveguide, CPR 112G (Grooved)				
Input Interface	N-Type Female, 50 Ohms				
Connectors	AC: EC320-C20	Ethernet: RJ45	M&C: DB15	RS-845: DB9	Redundancy: DB15
Mechanical					
Dimensions (L x W x H)	5 RU				
Weight	82Lb / 37kg				
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-Rack-5RU-GaN-23275

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