

# Solid State Power Amplifier Module 2000-6000 MHz, 200 Watts

## Model BME2969-200

### Overview

Stellant PST proudly introduces the highest power density solid state RF modules available in the marketplace today. Stellant PST's latest development expands on its proven innovative integrated RF GaN Power Amplifier designs by further increasing the RF power density, while improving overall operating efficiency. Consistent with its planned technology development roadmap, Stellant PST is leading the field with the latest in GaN-based RF device performance and advanced amplifier development. These highly integrated designs are ideal for use in communication, electronic warfare, and radar transmitter systems where space, cooling, and power are limited. Applications include ground (dismounted, mobile or fixed), surface, and airborne platforms.



### Features

- Highest Power Density to Footprint Ratio
- Ultra Wideband Operation
- Highest Efficiency Over the Entire Bandwidth
- Rugged and Reliable
- Extreme Temperature Range Usage
- RF Input/Output Sample Ports
- Internal DC to DC Converters
- Optional T/R Pin Switch Available
- Suitable Building Block for Rack Mounted Systems
- Maintains Output Power with Real-World Load Conditions

### Specifications

• Frequency Range:	2000 to 6000 MHz	• RF In/RF Out Sample Ports:	Yes
• RF Power Output (P3dB):	150 Watts Typical	• Control Interface:	RS-422 SPI
• Saturated Power Output (Psat):	200 Watts	• PA Enable/Disable:	3.3V TTL (<5μS)
• RF Input Range:	-16 to -3dBm Typical	• DC Input:	18-32Vdc
• RF input Overdrive:	+10 dBm Max.	• DC Power @ 24V:	840W Typical
• DC Bias:	AB Linear	• Efficiency (DC to RF):	18% Typical
• Modulation Format:	Multi-tone, CW, AM, FM, Pulse	• RF Connectors:	
• Input VSWR:	2.0:1 Typical	• RF Input and Sample Ports:	SMA (2X)
• Output Load VSWR:	2.0:1 Typical	• RF Output:	TNC-Female (1X)
• Harmonic (In Band 2nd/3rd):	<-12 dBc Typical	• Interface Connector:	D-Subminiature (1X)
• IM Products (4 Tones):	<-12 dBc Typical	• DC Power Connector:	D-Subminiature (1X)
• Spurious:	<-60 dBc	• Operating Temperature:	-40 to +85°C Baseplate (external heatsink required) +85°C @Pout of 150W +55°C @Pout of 200W
• Stability:	Open/Short Tested	• Environmental:	Shock/Vibration MIL-STD-810F
• Built in Test:	Composite Fault Indication (Over Temperature, Over Voltage, Over Current)	• Size:	15" x 6.7" x 2.3"
• Noise Power Output		• Weight:	15 lbs.
• Biased	-70dBm/Hz Typical		
• Quieted	-150dBm/Hz Typical		

### Power Systems Technology (PST)

105 Baylis Road  
Melville, NY 11747  
T: 631-777-8900

417 Boston St.  
Topsfield, MA 01983  
T: 978-887-5754



[www.Stellantsystems.com](http://www.Stellantsystems.com)



For more information, contact

[Sales@Stellantsystems.com](mailto:Sales@Stellantsystems.com)