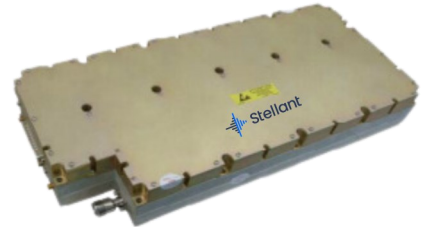


Solid State Power Amplifier Module 2000 to 6000 MHz, 3000 Watts

Model BME2969-300

Overview

Stellant PST proudly introduces the highest power density solid state RF modules available in the marketplace today. Stellant'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 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 (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 Output Coupled Sample Port
- Internal DC to DC Converters
- Suitable Building Block for Rack Mounted Systems
- Maintains Output Power with Real-World Load Conditions

Performance Specifications

• Frequency Range:	2000 to 6000 MHz	• Summary Fault Indication:	3.3V RS-422
• Saturated Power Output (P _{sat}):	300 Watts	• PA Blanking Enable/Disable:	3.3V RS-422 (<5μs)
• Output Power into 2.0:1 VSWR:	200 Watts Min	• DC Input:	18-32VDC
• RF Input Range:	-10 to 0dBm Typical	• DC Power @ 28V:	1800W Typical
• RF input Overdrive:	+10 dBm Max.	• Efficiency (DC to RF):	18% Typical
• DC Bias:	AB Linear	• RF Connectors:	
• Modulation Format:	Multi-tone, CW, AM, FM, Pulse	RF Input:	SMA (1X)
• Input VSWR:	2.0:1 Max	RF Output:	SC (1X)
• Output Load VSWR:	2.0:1 Typical	RF Out Coupled Sample:	SMA (1X)
• Harmonic (In Band 2nd/3rd):	<-20 dBc Typical	• Interface Connector:	D-Subminiature (1X)
• IM Products (4 Tones):	<-20 dBc Typical	• DC Power Connector:	D-Subminiature (1X)
• Spurious:	<-60 dBc	• Operating Temperature:	-40 to +70°C Baseplate
• Stability:	Open/Short Tested	• (External heatsink required)	
• Built in Test:	Composite Fault Indication RS-422 (Over Temp, Over Current)	• Altitude:	up to 50kft
• Fwd./Rev. Sample:	Analog Voltage	• Relative Humidity:	100% Condensing
• Noise Power Output:		• Environmental:	Shock/Vibration MIL-STD-810F
- Biased:	-70dBm/Hz Typical	• Size:	15.25" x 7" x 2.67"
- Quieted:	-150dBm/Hz Typical	• Weight:	17 lbs. Max

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