

# Solid State Power Amplifier Module

## 1000-2500 MHz, 250 Watts – Model BME19258-250

Stellant PST introduces high-power-density solid-state RF modules, advancing GaN amplifier efficiency and performance. Designed for communication, electronic warfare, and radar systems, these compact, high-efficiency modules excel in ground, surface, and airborne applications where space, cooling, and power are constrained.



### KEY 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 w/Real-World Load Conditions

### SPECIFICATIONS




Frequency Range	2000-6000 MHz	RF In/RF Out Sample Ports	Yes
Saturated Power Output (Psat)	300 Watts	Control Interface	RS-422 SPI
Output Power Into 2.0:1 VSWR	200 Watts Min	PA Enable/Disable	Low Volt. TTL (<5µS) 3.3V
RF Input Range	-10 to 0 dBm Typical	DC Input	18-32 VDC
RF Input Overdrive	+10 dBm Max	DC Power @ 24V	1000W Typical
DC Bias	AB Linear	Efficiency (DC to RF)	25% Typical
Modulation Format	Multi-tone/CW/AM/FM/Pulse	Noise Power Output	-80 dBm/Hz Typical
Input VSWR	2.0:1 Max	<b>RF Connectors</b>	
Output Load VSWR	2.0:1 Typical	RF Input and Sample Ports	SMA (3X)
Harmonic (In Band 2nd/3rd)	< -20 dBc Typical	RF Output	TNC-Female
IM Products (4 Tones)	< -20 dBc Typical	Interface Connector	D-Subminiature
Spurious	< -60 dBc	Operating Temperature	-40 to 85°C Baseplate (external heatsink required)
Stability	Open/Short Tested	Environmental	Shock/Vibration MIL-STD- 810F
Built in Test	Composite Fault Indication RS-422 (Over Temp, Over Current)	Size	15" x 9" x 2.25"
Fwd/Rv Sample	Analog Voltage	Weight	14.5 lbs
<b>Noise Power Output</b>			
Biased	-70dBm/Hz Typical		
Quieted	-150dBm/Hz Typical		

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