

Solid State Power Amplifier Module 6-18 GHz, 100 Watts

Model BME69189-100

Overview

Stellant PST proudly introduces its latest addition to its GaN solid state power amplifier product line. Stellant's latest development continues to expand on its integrated RF GaN Power Amplifier designs by offering a small form factor (SFF) module. Consistent with its planned technology development roadmap, Stellant proudly introduces the latest in GaN-based 6-18GHz RF amplifier for TWT/MPM Replacement. This highly integrated design is ideal for use in communication, electronic warfare, and radar transmitter systems where space, cooling, and power are limited. Stellant PST is a leading supplier in custom built solid state amplifiers for the U.S. and International markets.



Features

- Ultra Wideband Operation
- Full Power across the Entire Bandwidth
- Rugged and Reliable
- Compact and Lightweight
- GaN Technology
- Low Harmonic Distortion
- Low Voltage Operation
- Soft Failure - Graceful Degradation
- Integrated RF Power Reporting
- +28V or +270V DC Input

Specifications

• Frequency Range:	6-18 GHz	• DC/Control Interface:	9-pin Combo D
• RF Power Output (P _{sat}):	100 Watts typical	• PA Enable/Disable:	5.0V TTL (<2μS)
• Gain @ 100 watts:	>46 dB typical	• DC Input:	+28V (270V optional)
• RF input Overdrive:	+10 dBm Max.	• DC Power @ Standby:	<30W
• Gain Flatness @ 5 dBm Input	±2.0dB typical	• Efficiency (DC to RF):	>10% typical
• Class of Operation:	AB Linear	• RF Connectors:	
• Input/Output VSWR:	2.0:1 Maximum	• RF Input:	SMA Female field replaceable
• Output Power into 2:1 Load:	>70 Watts typical	• RF Output:	TNC Female field replaceable
• Harmonics		• Operating Temperature:	-40 to +75°C baseplate (External heatsink required)
2fo:	<-12dBc	• Environmental:	Shock/Vibration MIL-STD-810F
3fo:	<-22dBc	• Size:	8.0" x 6.0" x 2.5"
• Spurious:	<-60 dBc	• Weight:	5.5 lbs.
• Stability:	Open/Short Tested	• Noise Power Output:	-90 dBm/Hz typical
• Built in Test:	Over Current Fault Over Temperature Fault High Reflected Power Fault		

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