

Solid State Power Amplifier Module 4-18 GHz, 50 Watts

Model BME49189-50

Overview

Stellant PST proudly introduces a new ultra-wideband high-power solid-state RF module. Comtech's latest development continues to expand on its proven innovative integrated RF GaN Power Amplifier designs by further increasing the bandwidth and power density. Consistent with its planned technology development roadmap, Stellant proudly introduces the latest in GaN-based 4-18GHz RF amplifier. This highly integrated design is ideal for use in communication, electronic warfare, and radar transmitter systems where space, cooling, and power are limited. This unit is ideal for UAV/Airborne, Ground Mobile, Surface and Shipboard applications.



Features

- Ultra Wideband Operation
- High Efficiency
- Full Power across the Entire Bandwidth
- Rugged and Reliable
- Low Harmonic Distortion
- Compact and Lightweight
- GaN Technology

Specifications

• Frequency Range:	4-18 GHz	• DC/Control Interface:	7-pin Combo D
• RF Power Output (P3dB):	>50 Watts typical	• PA Enable/Disable:	5.0V TTL <1.2 us full RF ON/OFF typical
• Gain @ 40 watts typical:	>49 dB typical	• DC Input:	+28Vdc + 0.3Vdc
• RF input Overdrive:	+10 dBm Max.	• Max DC Power:	<370W
• Gain Flatness @ 40W (50Ω)	±4.5dB typical	• DC Power @ Standby:	< 10W
• Class of Operation:	AB Linear	• Efficiency (DC to RF):	>15% typical
• Input VSWR/Output VSWR:	2.0:1 Maximum	• RF Connectors:	
• Output Load VSWR:	2.0:1 Full Power	RF Input:	SMA Female field replaceable
• Harmonics:		RF Output:	SMA Female field replaceable
2fo:	<-16dBc typical	• Operating Temperature*:	-40 to +85°C Baseplate (external heatsink required)
3fo:	<-30dBc typical	• Environmental:	Shock/Vibration MIL-STD-810F
• Noise Output Power	-105dBm/Hz typical	• Relative Humidity:	95% Non-Condensing
• Spurious:	<-60 dBc	• Size:	6.56" x 3.50" x 0.84"
• Stability:	Open/Short Tested	• Weight:	1.5 lbs. max.
• Built in Test:	Composite Fault Indication Over Current Fault Over Temperature Fault		

*Performance specified -40°C to +55°C baseplate.
Performance may degrade linearly above +55°C baseplate.

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