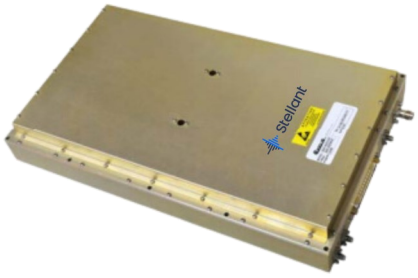
Stellant
Power Systems Technology (PST)

Solid State Power Amplifier 1000 to 2000 MHz, 300 Watts

Model BME1929-300

Overview

Stellant PST proudly introduces the highest power 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 (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

Performance Specifications

Frequency Range:	1000 to 2500 MHz
RF Power Output (P3dB):	250 Watts Typical
Saturated Power Output (Psat):	280 Watts
RF Input Range:	-20 to -10dBm Typical
RF input Overdrive:	20 dBm Max.
DC Bias:	AB Linear
Modulation Format:	Multi-tone, CW, AM, FM, Pulse
Input VSWR:	2.0:1 Typical
Output Load VSWR:	2.0:1 Typical
Harmonic (In Band 2nd/3rd):	<-13 dBc Typical
IM Products (4 Tones):	<-13 dBc Typical
Spurious:	<-60 dBc
Stability:	Open/Short Tested
Built in Test:	Composite Fault Indication (Over Temperature, Over Voltage, Over Current)

RF In/RF Out Sample Ports:	Yes
Control Interface:	RS-422 SPI
PA Enable/Disable:	Low Volt. TTL (<5µS) 3.3V
DC Input:	18-32Vdc
DC Power @ 24V:	1200W Typical
Efficiency (DC to RF):	25% Typical
Noise Power Output:	-80dBm/Hz typical
RF Connectors:	
RF Input and Sample Ports:	SMA (3X)
RF Output:	TNC-Female
Interface Connector:	D-Subminiature
Operating Temperature:	-40 to 85°C Baseplate (external heatsink required)
Environmental:	Shock/Vibration MIL-STD-810F
Size:	15" x 9" x 2.25"
Weight:	14.5 lbs.

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