

Solid State Power Amplifier Module

1000 to 2500MHz, 250 Watts

MODEL BME19258-250

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 (P_{sat}): 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: 1000W 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.

COMTECH PST proudly introduces the highest power solid state RF modules available in the marketplace today. Comtech'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, Comtech 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.