

Solid State Power Amplifier Module

6 to 18GHz, 100 Watts

MODEL BME69189-100

TWT/MPM Replacement 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



Performance Specifications

- Frequency Range: 6-18 GHz
- RF Power Output (P_{sat}): 100 Watts typical
- Gain @ 100 watts: >46 dB typical
- RF input Overdrive: +10 dBm Max.
- Gain Flatness @ 5 dBm Input: ±2.0dB typical
- Class of Operation: AB Linear
- Input/Output VSWR: 2.0:1 Maximum
- Output Power into 2:1 Load: >70 Watts typical
- Harmonics:
 - 2fo: <-12dBc
 - 3fo: <-22dBc
- Spurious: <-60 dBc
- Stability: Open/Short Tested
- Built in Test: Over Current Fault
Over Temperature Fault
High Reflected Power Fault

- DC/Control Interface: 9-pin Combo D
- PA Enable/Disable: 5.0V TTL (<2μS)
- DC Input: +28V (270V optional)
- DC Power @ Standby: <30W
- Efficiency (DC to RF): >10% typical
- RF Connectors:
 - RF Input: SMA Female field replaceable
 - RF Output: TNC Female field replaceable
(External heatsink required)
- Operating Temperature: -40 to +75°C baseplate
(External heatsink required)
- Environmental: Shock/Vibration MIL-STD-810F
- Size: 8.0" x 6.0" x 2.5"
- Weight: 5.5 lbs.
- Noise Power Output: -90 dBm/Hz typical

COMTECH PST proudly introduces its latest addition to its GaN solid state power amplifier product line. Comtech'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, Comtech 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. Comtech PST is a leading supplier in custom built solid state amplifiers for the U.S. and International markets.