Solid State Pulsed Power Amplifier Module
3.1-3.5GHz, 900 Watts
MODEL BMPC318358-900

Features:
- AB Linear Gallium Nitride (GaN) Technology
- High Output Power Dynamic Range
- Excellent Efficiency
- RF Input & Output Sample Detectors
- Pulse Width and Duty Factor Protection
- Thermal and Load VSWR Protection
- Optional Digital Interface for Control & Status Monitoring
- Optional Phase and Amplitude Control
- Suitable Building Block for Phased Array Systems

Performance Specifications
- Frequency Range: 3.1 to 3.5 GHz
- Peak Output Power: 900W (+59.5dBm)
- Power Gain: 37dB nominal @ 900W
- Power Gain Variation: ±1 dB @ 900W
- Pulse Width: 2 to 200 µs max
- Duty Cycle: 10% max
- Pulse Droop: <1.0dB
- Pulse Rise & Fall Time: <60ns typical
- Input VSWR: <1.5:1
- Output Load VSWR: <2:1
- Load VSWR Protection: »VSWR
- Input RF Sample: -30dBc nominal
- Output Fwd. & Ref. Sample: -50dBc nominal
- Harmonics:
  - 2Fo: <40dBc
  - 3Fo: <50dBc
- DC Voltage Input: +50VDC ±1VDC
- DC Supply Current: 6 Amps nominal for 10% DF
- RF to DC Efficiency: 35% nominal
- Operating Temperature: 0°C to +55°C baseplate
- Operating Humidity: 0 to 95% non-condensing
- Operating Shock & Vibration: Per MIL-STD-810F
- Operating Altitude: 10,000 Ft.
- Control Interface: RS-485
- PA Enable/Disable: RS-422 (<1µS)
- RF Connectors:
  - RF Input and Sample Ports: SMA
  - RF Output: Type N
- DC & Interface Connector: Combo-D-Subminiature
- Size: 10.1” x 6.33” x 1.60”
- Weight: 5 lbs.

COMTECH PST proudly introduces a new Gallium Nitride (GaN) amplifier for applications in the S-Band radar market. The AB linear design operates over the 3.1-3.5 GHz frequency band and is easily modified to also support 2.9-3.1 GHz radar applications. The amplifier design features include options for control of phase and amplitude to allow for integration into high power systems utilizing conventional binary or phased array combining approaches for power levels of up to 10kW.

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.