

# Solid State Power Amplifier Module

## 4 to 18GHz, 50 Watts

### MODEL BME49189-50

#### Features:

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



## Performance Specifications

• Frequency Range:	4-18 GHz
• RF Power Output (P3dB):	≥50 Watts typical
• Gain @ 40 watts typical:	>49 dB typical
• RF input Overdrive:	+10 dBm Max.
• Gain Flatness @ 40W (50Ω)	±4.5dB typical
• Class of Operation:	AB Linear
• Input VSWR/Output VSWR:	2.0:1 Maximum
• Output Load VSWR:	2.0:1 Full Power
• Harmonics:	
2fo:	<-16dBc typical
3fo:	<-30dBc typical
• Noise Output Power	-105dBm/Hz typical
• Spurious:	<-60 dBc
• Stability:	Open/Short Tested
• Built in Test:	
	Composite Fault Indication
	Over Current Fault
	Over Temperature Fault

• DC/Control Interface:	7-pin Combo D
• PA Enable/Disable:	5.0V TTL <1.2 us full RF ON/OFF typical
• DC Input:	+28Vdc ± 0.3Vdc
• Max DC Power	<370W
• DC Power @ Standby:	< 10W
• Efficiency (DC to RF):	>15% typical
• RF Connectors:	
RF Input:	SMA Female field replaceable
RF Output:	SMA Female field replaceable
• Operating Temperature*:	-40 to +85°C Baseplate (external heatsink required)
• Environmental:	Shock/Vibration MIL-STD-810F
• Relative Humidity	95% Non-Condensing
• Size:	6.56" x 3.50" x 0.84"
• Weight:	1.5 lbs. max.

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

COMTECH 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, Comtech 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.