

# Ultra-Wideband High Power Solid State Power Amplifier

## 20 to 6000 MHz, 300 Watts

### MODEL BHED2769-300

#### Features:

- Operating Frequency, 20-6000 MHz
- Solid State GaN Technology
- Three Independent Operating Bands
- Simultaneous Operation
- Full Forward Power into 2:1 Load VSWR
- Internal Digital Power Level Control
- RS-422 Interface and Controls
- Internal DC to DC Converters
- 1 us Blanking Speed
- Military Mechanical Packaging
- Internal Forced Air Cooling
- -40°C to +50°C Ambient Operating Temperature



## Performance Specifications

#### 20-1000 MHz

- 300 Watts +1/-0 dB
- 60 dB Gain
- 300W Min. into 2:1 load
- Load VSWR Protection
- ALC Controls
- RS422 Interface
- Harmonics -13 dBc
- DC Input 24-32 VDC
- DC Input Power 2400W

#### 800-2500 MHz

- 300 Watts +2.5/-0 dB
- 60 dB Gain
- 300W Min. into 2:1 load
- Load VSWR Protection
- ALC Controls
- RS422 Interface
- Harmonics -13 dBc
- DC Input 24-32 VDC
- DC Input Power 2800W

#### 2500-6000 MHz

- 150 Watts +1/-0 dB
- 53 dB Gain
- 150W Min. into 2:1 load
- Load VSWR Protection
- ALC Controls
- RS422 Interface
- Harmonics -12 dBc
- DC Input 24-32 VDC
- DC Input Power 1400W

COMTECH PST proudly introduces the latest Gallium Nitride (GaN) solid state RF amplifier that supports amplification of complex signals over the frequency band of 20-6000MHz. Three independent amplifiers are housed in a rugged military enclosure that allows for integration onto vehicle and airborne platforms. Each independent amplifier band can be operated simultaneously and in addition, each band contains a multimode digital ALC board that supports FM/CW, AM, and multi-tone signal characteristics. A key feature of the digital ALC is a soft start that eliminates pulse overshoot during RF turn-on and pulse modulation. The mechanical enclosure includes a heat sink and cooling fans enabling simultaneous operation of all three bands at altitudes of 20,000 feet and ambient temperature of -40° to +50° degrees C. The robust mechanical package includes protection against moisture and supports operation in an environment of 0-100% humidity with condensation. The size of the enclosure (including connectors) is 26"x19"x8.5" and weighs less than 140 pounds. The amplifier system is well suited for Electronic Warfare, including Jamming & Electronic Attack and secure communication applications where size, weight and power are critical.