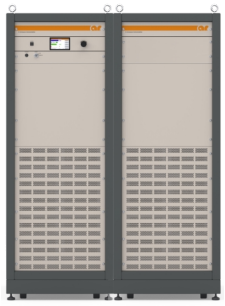
# 3000W1000B

## 80 MHz - 1000 MHz, Class A Solid State Amplifier



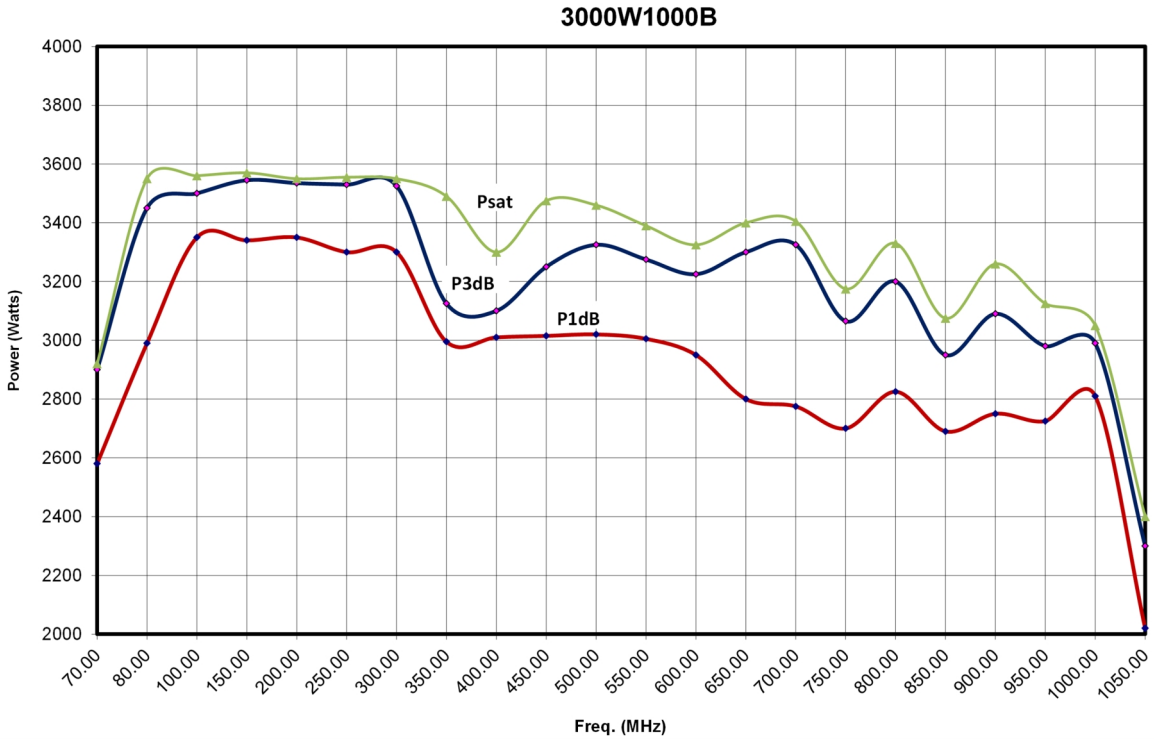
The Model 3000W1000B is a self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. When used with an RF sweep generator, nominally provides over 3000 watts of RF power and a minimum 2400 watts of P1dB power.

The amplifier is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a color LCD touch screen and a single rotary knob to offer status reporting and control capability. The display provides operational presentation of Forward Power and Reflected Power plus amplifier status. All amplifier control functions, and status indications are available remotely in GPIB/IEEE- 488 format and RS-232 hardware and fiber optic, USB and Ethernet. The bus interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

### MAIN FEATURES

- **Class A Operation**
- **Touch Screen Display**
- **100% Mismatch Tolerant**
- **Scalable Modular Construction**
- **Ethernet, USB, GPIB, RS-232 Remote Interface**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL), Telecom Component Test and Aerospace & Defence**



## Technical Specifications

| | |
|---|---|
| Frequency Range | 80 - 1000 MHz |
| Rated Output Power | 2800W (min) |
| Power Output @ 1dB Compression | 80-500MHz - 2250W (min) - 2500W (typ) |
| Power Output @ 1dB Compression | 500-1000MHz - 1850W (min) |
| Input for Rated Output | 0dBm (1mW) |
| Small Signal Gain | 64.8 dB |
| Gain Variation (max) ± | +/- 1.5dB (typ) \| +/- 2.0dB (max) dB |
| Gain Control Adjust When Below P1dB | 20 dB |
| Harmonics @ P1dB (min) | -20 dBc |
| Spurious (typ) | -73 dBc |
| Input VSWR | 1.3:1 (typ) - 1.5:1 (max) |
| Output VSWR | 2:1 (typ) |
| Output Impedance | 50 Ohm |
| 3rd Order Intercept Point | 74 dB |
| Noise Figure (typ) | 8 dBm |
| Modulation Formats | AM, FM, PM, ODFM |
| Maximum Input Power (no damage) | 13 dBm |
| Output VSWR Tolerance | 6:1 (Foldback) |
| Stability | Unconditional |

## General Specifications

| | |
|---|---|
| Acoustic Noise (measured @ 1 m) | 64 dBA |
| Supply Frequency | 47 to 63 (Hz) |
| Three Phase 5 Wire WYE Low Line | 200 to 240 VAC |
| Three Phase 5 Wire WYE | 380 to 415 VAC |
| Three Phase 4 Wire Delta | 200 to 240 VAC |
| Supply Power (max) | 14 KVA |

## Mechanical Specifications

| | |
|---|---|
| RF Input Connector | Type-N Female (Rear Panel) |
| RF Output Connector | Type-1-5/8 Female (Rear Panel) |
| RF Sample Port Connectors | Type-N Female, (coupling factor 70 dB typical) |
| Safety Interlock | 15-Pin Subminiature D Female |
| Dimentions (With Cabinet) (W x H x D) | (40U) 111.8 x 177.8 x 97.6 cm (44 x 70 x 38.4 in) |
| Weight (With Cabinet) | 364 kg (800 lbs) |
| Cooling System | Forced air (self contained fans) |
| Com. Interface | IEEE-488 / RS-232 / RS-232 (fiber optic) / USB 2.0 / Ethernet |

## Environmental Specifications

| | |
|---|---|
| Ambient Running Temperature | +5°C to +40°C |
| Storage Temperature | -20°C to +50°C |
| Maximum Altitude | up to 2000m |
| Shock and Vibration | Normal Truck Transport |

## Regulatory Compliance (CE)

| | |
|---|---|
| EMC | EN 61326-1 |
| Safety | UL 61010-1 |
| RoHS | DIRECTIVE 2011-65-EU |
| Export Classification | No Licence Required |