



# Model 3900-2

**ISO 9001 CERTIFIED**

**200 - 500 MHz, pulsed,  
solid-state, RF power  
amplifier system**

**Electrical specifications:**

|                                 |   |
|---------------------------------|---|
| Frequency range                 | 200 - 500 MHz   |
| Pulse power (min.) into 50 ohms | 50 W<br>100 W   |
| CW power (max.) into 50 ohms    | 15 W  |
| Gain (typ.)                     | 47 dB   |
| Gain flatness                   | ±3 dB   |
| Input/Output impedance          | 50 ohms   |
| Input VSWR                      | < 2:1   |
| Pulse width (Max/ch)            | 20 ms   |
| Duty cycle                      | Up to 10%   |
| Amplitude rise/fall time        | 175 ns typ.   |
| Amplitude droop                 | <10% to 10 ms typ.; 15% max   |
| Noise figure                    | 9 dB typ.   |
| Output noise (blanked)          | < 20 dB over thermal  |
| Blanking delay                  | < 1 µs on/off, TTL signal   |
| Protection                      | 1. VSWR: infinite VSWR at rated power<br>2. Input overdrive: up to 10 dB<br>3. Over duty cycle/pulse width<br>4. Over temperature |

**Supplemental characteristics:**

|                              |  |
|------------------------------|--|
| Connectors, rear panel (2ea) | 1. RF input: BNC (F)<br>2. RF outputs: Type N (F)<br>3. Noise blanking: BNC (F)<br>4. Interface: 25 pin D(F), EMI filtered           |
| Controls, front panel        | 1. AC power<br>2. Duty cycle<br>3. Duty cycle  |
| Indicators, front panel      | 1. AC power on<br>2. Over pulse width<br>3. Over duty cycle<br>4. Over temperature<br>5. Overdrive<br>6. CW mode<br>7. FWD/RFL power |
| System monitors              | 1. Thermal fault<br>2. DC power supply fault<br>3. Over duty cycle/pulse width<br>4. Forward/reflected RF power                      |
| Cooling                      | Internal forced air  |
| Operating temperature        | +10 to 40°C  |
| AC line voltage              | 120/240 VAC, ±10%, 50 - 60 Hz  |
| AC power requirements        | 1300 watts   |
| Package                      | Rack mount   |
| Size (HWD, inches)           | 5.25x19x24   |
| Net weight                   | 75 lbs   |