

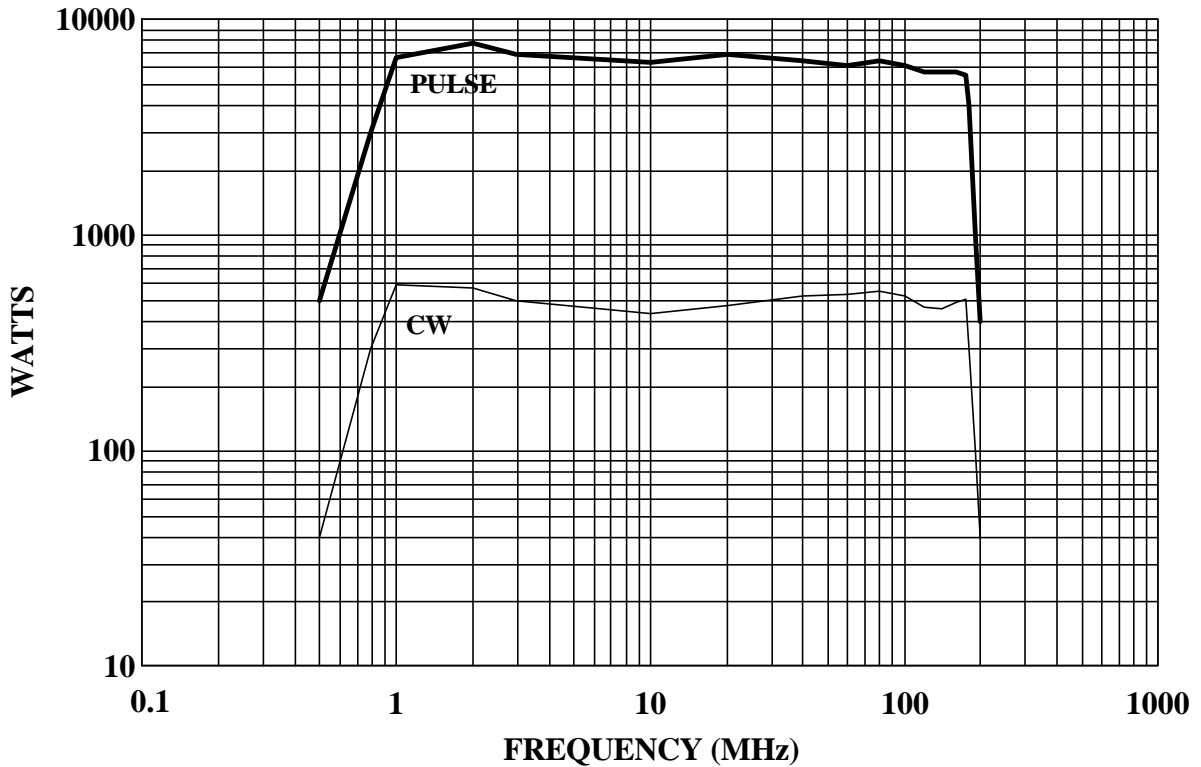


160 School House Road, Souderton, PA 18964-9990 USA
Phone 215-723-8181 • FAX 215-723-5688

MODEL 5000LP
400 WATTS CW
5000 WATTS PULSE
1 - 175 MHz

The Model 5000LP is an inexpensive, broadband amplifier designed for applications requiring instantaneous bandwidth, high gain, high power pulse output. It employs the latest design technology in its all-solid-state, low power stages and vacuum tube final and driver amplifiers. A continuously variable input attenuator permits the operator to adjust the output level as desired. Housed in a stylish contemporary enclosure, the Model 5000LP is smaller and lighter than competitive equipment with similar power levels. The final amplifier stage operates in a gated mode to improve efficiency, reduce output noise, and increase the pulse on/off ratio. In operation, the amplifier requires a gate input pulse synchronized with the RF input pulse. A rear panel connector enables remote control of, POWER, STANDBY, OPERATE, and PULSE functions. When connected to Model CP2001 or CP3000, these functions are respectively controlled by TTL level signals or IEEE-488 bus.

5000LP TYPICAL POWER OUTPUT



SPECIFICATIONS

Model 5000LP

POWER OUTPUT

Pulse

| | |
|------------------|--------------------------|
| Minimum..... | 5000 watts |
| Duty Cycle..... | 5% |
| Pulse Width..... | 8.0 milliseconds maximum |

CW

| | |
|--------------|-----------|
| Minimum..... | 400 watts |
|--------------|-----------|

FLATNESS..... ± 1.5 dB

FREQUENCY RESPONSE..... 1 - 175 MHz instantaneously

INPUT FOR RATED OUTPUT..... 1.0 milliwatt maximum

GAIN (at maximum setting)..... 67 dB minimum

GAIN ADJUSTMENT (continuous range)..... 18 dB minimum

INPUT IMPEDANCE..... 50 ohms, VSWR 1.5:1 maximum

OUTPUT IMPEDANCE..... 50 ohms, VSWR 2.0:1 maximum

MISMATCH TOLERANCE*..... 100% of rated power without foldback. Will operate without damage, or oscillation with any magnitude and phase of source and load impedance.

MODULATION CAPABILITY..... Linear amplitude and phase response to over 80 MHz allows faithful reproduction of AM, FM, pulse, or phase modulation appearing on the input signal

HARMONIC DISTORTION..... Minus 15 dBc maximum at 4000 watts

GATING CHARACTERISTICS

Pulse mode pedestal/CW mode blanking

| | |
|-----------------------------|---|
| Signal (into 180 ohms)..... | Plus or minus 2.5 to 6.0 VDC |
| Rise time..... | 15 microseconds maximum |
| Fall time..... | 4 microseconds maximum |
| RF rise/fall time..... | 10 nanoseconds maximum |
| RF pulse droop..... | 2% max. @ 4 milliseconds, 4% @ 8 milliseconds |

PRIMARY POWER (specify one)..... 200/208 $\pm 5\%$ VAC, 3 phase, 50/60 Hz
390/415 $\pm 5\%$ VAC, 3 phase, 50/60 Hz
11 kVA nominal

CONNECTORS

| | |
|---------------------|------------------------------|
| RF input..... | Type BNC female |
| RF output..... | Type C female |
| Blanking..... | Type BNC female |
| Remote control..... | 25 pin female subminiature D |

COOLING..... Forced air (self contained fans)

WEIGHT..... 250 kg (550 lb)

SIZE (WxHxD)..... 56.1 x 149.9 x 58.4 cm
22.1 x 59.0 x 23.0 in

* See Application Note #27