



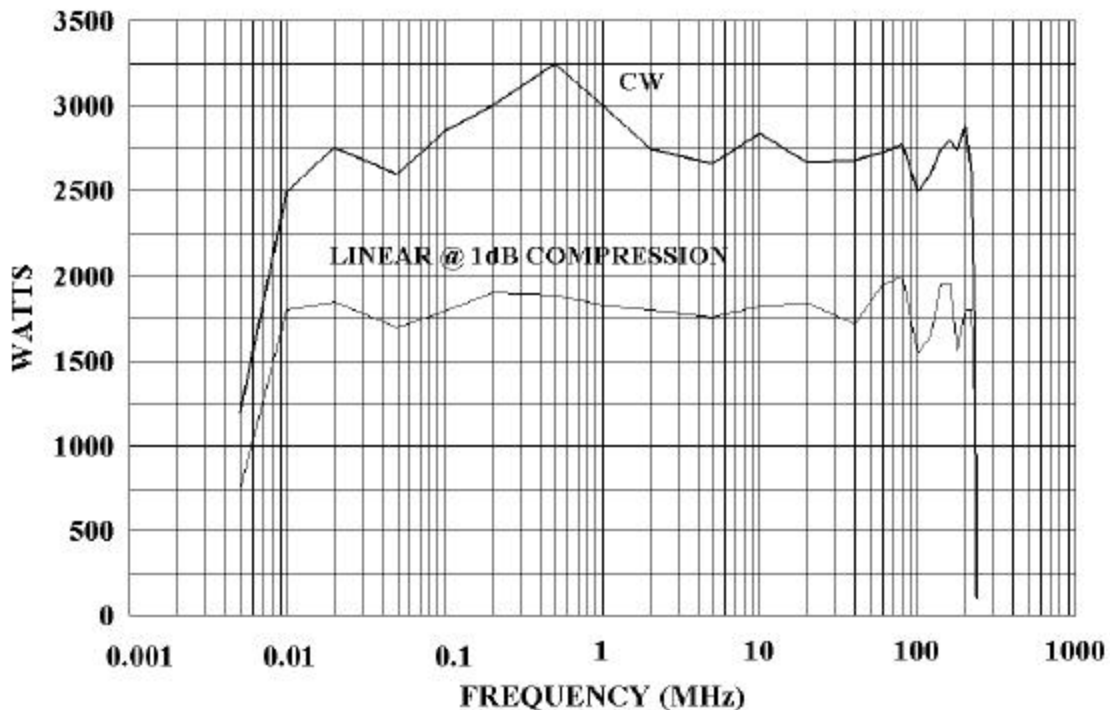
160 School House Road, Souderton, PA 18964-9990 USA
Phone 215-723-8181 • FAX 215-723-5688

MODEL 2500L
2500 WATTS CW
3500 WATTS PULSE
10 kHz - 220 MHz

The Model 2500L is an economical, self-contained, broadband amplifier designed for laboratory applications that require instantaneous bandwidth, high gain, and high power output. Housed in a stylish contemporary enclosure, the Model 2500L is smaller than competitive units with similar power levels. All operating controls are functionally grouped on the front panel for simplicity of operation. These include modern, lighted push button switches for the command functions, POWER, STANDBY, OPERATE and Low Range, a control for setting the output level of the amplifier, and a meter for monitoring critical operating voltages and currents. A highly versatile unit, the Model 2500L features rugged circuitry and a quick-acting, solid state crowbar circuit to protect the final amplifier tubes from damage due to internal arcing. An electronic circuit is provided to enable rapid gating or blanking of the amplifier.

A Remote control interface connector provides control of POWER, STANDBY, OPERATE and PULSE functions. When connected to the Model CP3000A, these functions are controlled by TTL level signals or IEEE-488 bus.

2500L TYPICAL POWER OUTPUT



SPECIFICATIONS
MODEL 2500L

POWER OUTPUT

High Range

Pulse

Minimum4000 watts to 150MHz
3000 watts to 220MHz

Duty Cycle.....15%

Pulse Width8 milliseconds

CW

Minimum2500 watts minimum

Linear @ 1dB compression.....1750 watts nominal
1250 watts minimum

Low Range.....100 watts nominal

FLATNESS, high range.....± 1.5 dB

FREQUENCY RESPONSE10 kHz - 220 MHz

INPUT FOR RATED OUTPUT1.0 milliwatt maximum

GAIN

High Range (at maximum setting)64 dB minimum

Low Range (at maximum setting).....50 dB nominal

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

INPUT IMPEDANCE50 ohms, VSWR 1.5:1 maximum

OUTPUT IMPEDANCE50 ohms, VSWR 2.0:1

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 response allows faithful reproduction of AM, FM, or Pulse modulation appearing on the input signal.

HARMONIC DISTORTION AT 1800 WATTS.....at < 120 MHz, -17 dBc maximum
at > 120 MHz, -30 dBc maximum

THIRD ORDER INTERCEPT POINT, CW/PULSE70/73 dBm typical

GATING CHARACTERISTICS (Pulse mode pedestal/CW mode blanking)

Signal (into 180 ohms)± 2.5 to 6.0 VDC

Rise Time.....25 microseconds maximum

Fall Time.....5 microseconds maximum

RF Rise/Fall Time10 nanoseconds

PRIMARY POWER (specify one)200/208 VAC, 3 phase, 50/60 Hz
380/415 VAC, 3 phase, 50/60 Hz
17 KVA nominal

CONNECTORS

RF InputType BNC female

RF Output, high rangeType C female

RF Output, low range.....Type N female

Gating/BlankingType BNC female

Remote Control25 pin female subminiature D

COOLING OPTIONS (tap water recommended)Self contained forced air; tap water, 19 LPM (5 GPM) @
20° C maximum

WEIGHT.....363 kg (800 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