AMPLIFIER RESEARCH
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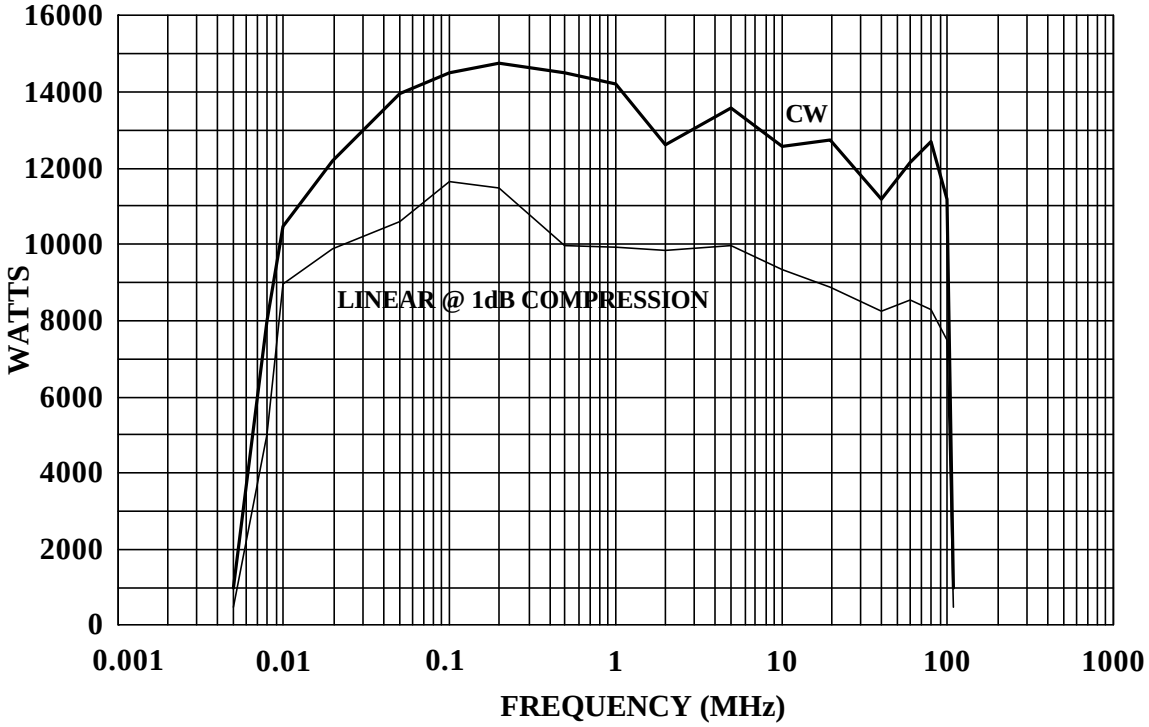
MODEL 10,000LM45
10,000 WATTS CW
10 kHz - 100 MHz

The Model 10,000LM45 is a self-contained, broadband amplifier designed for laboratory applications where broad frequency range, high gain, and high power output are required. The combination of a high power internal load, specially designed, protective circuitry, and rugged liquid cooled tetrodes provides a truly high power broadband amplifier capable of driving any load impedance without power foldback or fear of damage. A rear panel mounted connector is provided for remote control of the POWER, STANDBY, and OPERATE functions. When connected to our CP2001 or CP3000, these functions may be accomplished by TTL or IEEE bus. A continuously variable input attenuator permits the operator to adjust the output level as desired. AR model DC4000 dual directional coupler is available to permit monitoring of forward and reflected power levels.

This M45 version comes with a liquid to air cooled heat exchanger and requires no external cooling water. The heat exchanger may be installed indoors or outdoors to reduce inside noise and heat load.

10,000LM45 TYPICAL POWER OUTPUT



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SPECIFICATIONS
Model 10,000LM45

POWER OUTPUT, CW	
Nominal	***12,600 watts***
Minimum	***10,000 watts***
Linear @ 1dB compression	***7500 watts minimum***
FLATNESS	***±1.5 dB***
FREQUENCY RESPONSE	***10 kHz - 100 MHz***
INPUT FOR RATED OUTPUT	***1.0 milliwatt maximum***
GAIN (at maximum setting)	***70 dB minimum***
GAIN ADJUSTMENT (continuous range)	***18 dB minimum***
INPUT IMPEDANCE	***50 ohms, VSWR 1.5:1 maximum***
OUTPUT IMPEDANCE	***50 ohms, nominal***
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	***Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal***
HARMONIC DISTORTION	***Minus 15 dBc maximum at 7500 watts***
BLANKING CHARACTERISTICS	
Signal (into 50 ohms)	***Plus 4.0 to 6.0 VDC***
Delay time	
Signal on to RF off	***5 microseconds maximum***
Signal off to RF on	***25 microseconds maximum***
RF rise/fall time	***10 nanoseconds maximum***
PRIMARY POWER (specify one)	***200/208 ±5% VAC, 3 phase, 60 Hz*** ***380/415 ±5% VAC, 3 phase, 50/60 Hz*** ***400/415 ± 5% VAC, 3 phase, 50/60 Hz*** ***75 kVA maximum***
CONNECTORS	
RF input	***Type BNC female on front panel***
RF output	***Type EIA 1 5/8 on rear panel (male)***
Blanking	***Type BNC female on front panel***
Remote control	***25 pin female subminiature D on rear panel***
COOLING	***Air cooled via liquid to air heat exchanger operating at 45°C maximum ambient air temperature.***
WEIGHT (amplifier/heat exchanger)	***1134 kg (2500 lb)***
SIZE (WxHxD) Amplifier	***68.8 x 149.9 x 82.6 cm*** ***27.1 x 59.0 x 32.5 in***
Heat Exchanger	***68.8 x 149.9 x 120 cm*** ***27.1 x 59.0 x 47.25 cm***

*** See Application Note #27**

Installation drawing 1002600 available upon request