MODEL AL-1000-CV/A CONSTANT VOLTAGE POWER AMPLIFIER

The model AL-1000-CV/A power amplifiers are wideband, full complimentary class AB linear power amplifiers. The frequency response of this model is 47 Hz - 10K Hz (up to 20K Hz if low bound frequency starts from 2K Hz or higher). They are widely used in manufacturing industries and research laboratories where audio frequencies are needed for special testing. Applications include plasma excitation, induction heating, magnetic field generation and testing products such as Helmholtz coils, piezo elements, inductors, capacitors, etc.

Specifications of model AL-1000-CV/A Constant Voltage Power Amplifiers

Output:

- **Output Power:** 1000 watts
- **Output Volts:** 0-130 V rms. or 0-260 V rms. adjustable (unless otherwise specified)
- **Input Signal:** 0 – 1 V rms.
- **Frequency Response:** 47 Hz - 10K Hz (up to 20K Hz if low bound frequency starts from 2K Hz or higher)
- **Input Signal Waveform:** Sine wave (Square and triangle waveforms will work at less bandwidth.)
- **Maximum Output Current:** 7.7 A rms. @ 130 V rms. (3.85 A rms. @ 260 V rms.)
- **Output Regulation:** 1% Load Regulation at mid-band; .1% Line Regulation
- **Output Distortion:** 1% T.H.D. or better (up to 10K Hz)
- **Hum and Noise:** -65 dB below full output or better
- **Output Volt Meter:** Front panel analog meter
- **Output Amplitude Control:** 10-turn lockable pot on front panel
- **Output ON/OFF Control:** Back panel closed/open contact to enable/disable output signal
- **Short Circuit Protection:** Input line circuit breaker
- **Thermal Protection:** Auto-reset thermostat prevents heat damage
- **Power Factor Range:** +0.7 to -0.7 for full power; to zero @ reduced power

Input Power:

- **Power Efficiency:** 45% max.
- **Input Power:** 120 V AC 60 Hz (Default), L5-30S Socket 230 V AC 60 Hz (at request)
- **Input Line Current Req.:** 25 A @ 120 V AC (or 13 A @ 230 V AC)

Other Specifications:

- **Dimensions:** 7.0"H X 19"W X 23"D
- **Weight:** 125 lbs approx.
- **Cooling Method:** Internal fans (Intake-front; Output–rear)
- **Input Connection:** BNC connector on front panel
- **Output Connection:** Amphenol MS3102A connector (mating connector provided)
- **Operating Temp Range:** 20 to 140 deg F
- **Storage Temp Range:** -20 to 170 deg F

Note: If wider frequency response (higher than 20K Hz) is required, please refer to our wideband power amplifier (HF-A) series.