

rf/microwave instrumentation

Model 5000A3 5000 Watts CW 10kHz-3MHz

The Model 5000A3 is a self-contained, air-cooled, broadband, completely solid state amplifier designed for applications where instantaneous bandwidth and high gain are required. The Model 5000A3 when used with an RF sweep generator, will provide a minimum of 5000 watts of swept power.

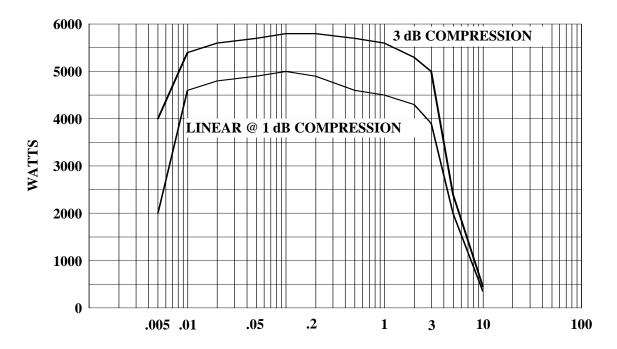
A digital control panel provides both local and remote control of the amplifier. The display provides operational presentation of forward power and reflected power, plus control status and reports of internal amplifier status. Special features include a gain control and RF output level protection.

All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format. The buss interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

High efficiency universal input, power factor corrected switching power supplies provides DC to all internal sub-assemblies.

Housed in a stylish, contemporary enclosure, the Model 5000A3 provides readily available RF power for typical applications such as component testing, watt meter calibration, particle accelerators, plasma generation, communications and use as a driver for higher power amplifiers.

5000A3 TYPICAL POWER OUTPUT



SPECIFICATIONS, MODEL 5000A3

RATED OUTPUT POWER	5000 watts, 10 kHz–3 MHz
INPUT FOR RATED OUTPUT	1.0 milliwatt maximum
POWER OUTPUT @ 1 dB COMPRESSION	2500 watts minimum
FREQUENCY RESPONSE	10 kHz-3 MHz instantaneously
GAIN (at maximum setting)	67 dB minimum
FLATNESS	± 1.0 dB maximum
GAIN ADJUSTMENT (continuous range)	20 dB minimum
INPUT IMPEDANCE	50 ohms, VSWR 1.5:1 maximum
OUTPUT IMPEDANCE	50 ohms, nominal
MISMATCH TOLERANCE	100% rated power without foldback up to 6.0:1 mismatch above which may limit to 2500 watts reflected power.
MODULATION CAPABILITY	Faithfully reproduces AM, FM or Pulse modulation appearing on input signal.
HARMONIC DISTORTION	Minus 20 dBc maximum at 2500 watts power output.
THIRD ORDER INTERCEPT POINT	74 dBm typical
RF POWER DISPLAY	Forward and Reverse
PRIMARY POWER	200-240 VAC Delta (4 wire), Wye compatible 346-416 VAC, Wye (5 wire) 400-480 VAC Delta (4 wire), Wye compatible 47-63 Hz, 3 phase (user must specify) 20,000 watts maximum at .95 P.F. typical
	Type EIA 1 5/8 male on rear panel Type BNC female on front panel, Forward/Reverse, 0-10Vdc 24 pin female GPIB/IEEE-488 connector on rear panel, RS-232, USB, Ethernet
IEEE-488 (GPIB) INTERFACE	Allows control of all amplifier functions and monitoring of all status indications via standard GPIB/IEEE-488 commands
COOLING	Forced air (self contained fans)
DIMENSIONS (H x W x D)	112.42 x 168 x 67.15 cm (44.26 x 66.18 x 26.44 in)
WEIGHT (approximate)	567 kg (1250 lbs)