



modular rf

**MODEL KAW5050**  
**1000 WATTS PEP**  
**500 WATTS CW**  
**225-400 MHz**

The Model KAW5050 is a Class AB wideband RF power amplifier system delivering up to 1000 Watts PEP power into a 50-Ohm load over the frequency range of 225 MHz to 400 MHz.

The system features forward and reflected power indications on a front-panel mounted digital display; Automatic Level Control (ALC); overdrive protection; full VSWR protection: over-temperature protection, PA final stages current balance protection. Controls include: AC power ON/OFF, transmit/receive, Key ON/OFF. Above functions are remotely accessible via 25-pin, D-sub connector. Additionally, Ethernet remote control is available through RJ-45 LAN port. Standard door interlock BNC connector is located on rear panel.

The system comprises a Power Amplifier, controller sub-system and AC Power Supply Units in a 19-inch equipment rack [Optional telescoping slides available.]. The system operates from single or three phase supplies 96-265 V<sub>AC</sub>, 47-400 Hz, via a configurable AC interface plug. The system is capable of operation from any two of the three power supply units. The system is configured to provide switchable Transmit and Receive paths using an internal coaxial relay.

**GENERAL SPECIFICATIONS**

POWER OUTPUT	1000 Watts PEP 500 Watts CW
FREQUENCY RANGE	225 MHz – 400 MHz
INPUT FOR RATED OUTPUT	30-40 Watts [20-30W optional]
GAIN	13 dB minimum
T/R SWITCHOVER TIME	<25 mS
INTERMODULATION DISTORTION	-35 to -45 dBc typical
MISMATCH TOLERANCE	Infinite, VSWR fold back begins at 3:1
PROTECTION	over-temperature @ 85°C on heatsink, overdrive, and VSWR Final stage current mismatch
MODULATION CAPABILITY	Will faithfully reproduce AM, FM, complex or pulse modulation appearing on the input signal up to the 1000W PEP limit
HARMONIC DISTORTION	<-70 dBc
SPURIOUS OUTPUTS	<-70 dBc @ 1000W PEP output
BROADBAND NOISE	-147 dBm/Hz typical
FRONT PANEL INDICATORS	Forward and reflected power shown on bar graph display as a percentage of rated power
PRIMARY POWER	2.0KVA configurable AC input, 96-276, 47-400 Hz, single or three phase, with AC breakers, AC connector is configurable D-sub hybrid
SIZE (HxWxD)	5.25 x 19.00 x 26.5 inches
WEIGHT	~50 lb
COOLING	Forced air front to back (self contained fans)
RF CONNECTORS	Type N female (Rear Panel)
OPERATING TEMPERATURE	-10 to 40 °C
ALTITUDE (operating)	10,000 ft

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