

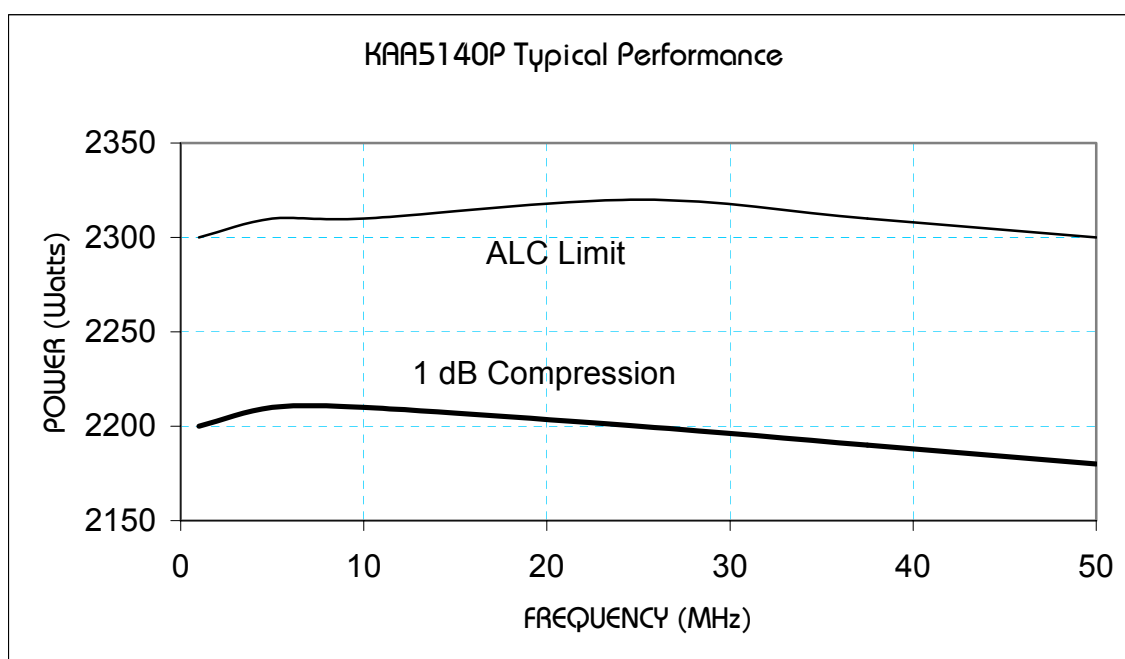
**MODEL KAA5140P**  
**2000 WATTS PULSE**  
**0.5 MHz - 50 MHz**

The Model KAA5140P is a wideband RF power amplifier system. The KAA5140P amplifier is a class AB amplifier and provides 2000 Watts pulsed power into a 50-Ohm load over the frequency range of 0.5 MHz to 50 MHz with a minimum power gain of 63 dB. GPIB control is possible with the optional IEEE488.2/RS232 Interface Controller Module.

The system features forward and reflected power indication on a front panel-mounted, analog meter; Automatic Level Control (ALC); RF gain control; overdrive protection; full VSWR protection; input blanking, and over-temperature protection. These features, plus remote power on/off control, are also accessible for remote operation through a 25-pin, D-subminiature connector. For a detailed description of these features refer to "SPECIAL FEATURES – KAA & KAW-SERIES SINGLE BAND RF POWER AMPLIFIERS".

The system consists of a Power Controller Unit, an Amplifier Unit and a Power Supply Unit. These are mounted into a standard, 19-inch equipment rack, 22 inches wide, 30 inches high, and 38 inches deep, outfitted with swivel-type, heavy-duty casters. All units mounted on telescoping slides.

The Model KAA5080 is self-contained and operates from 187-265 V<sub>AC</sub>, 47-63 Hz line. Power consumption is typically 5 kVA. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.



## SPECIFICATIONS

### Model KAA5140P

RATED POWER OUTPUT .....	2000 Watts
INPUT FOR RATED OUTPUT .....	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION .....	2000 Watts minimum
FLATNESS .....	± 1.5 dB maximum unleveled, ± 0.5 dB leveled
FREQUENCY RESPONSE .....	0.5 MHz - 50 MHz instantaneously
GAIN .....	63 dB minimum
GAIN ADJUSTMENT RANGE .....	30 dB typical
INPUT IMPEDANCE .....	50 Ohm nominal
OUTPUT IMPEDANCE .....	50 Ohm nominal
MISMATCH TOLERANCE .....	6:1
PROTECTION .....	VSWR, over-temperature, overdrive
MODULATION CAPABILITY .....	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION .....	-12 dBc typical
SPURIOUS OUTPUTS .....	-63 dBc maximum
FRONT PANEL METER .....	0 - 2000 Watt forward power, top scale % limit SET point reflected power, bottom scale
CONTROLS .....	[AC LINE]ON/OFF, [RF CTRL]ON/OFF (blanking) [METER]FWD/REFL [ALC]FAST/SLOW (Autom. Level Control) [VSWR]RESET MAN/AUTO, ALC, RF GAIN
INDICATORS .....	SYSTEM, BLANKING, [METER]MODE, [ALC] MODE, VSWR, TEMP, REMOTE ACTIVE
REMOTE INTERFACE (optional) .....	IEEE-488.2 & RS-232
RF CONNECTORS .....	Type N female
REMOTE CONTROL .....	IEEE488.2: 24-pin female, RS-232: 25- pin D-Subminiature female
REMOTE INTERLOCK .....	BNC female
OPERATING TEMPERATURE .....	-10 to 40 °C
COOLING .....	Forced air (self contained fans)
PRIMARY POWER .....	187 - 265 V <sub>r</sub> , 47 - 63Hz, single-phase, 5 kVA maximum
SIZE (W x H x D) .....	55.9 x 76.2 x 96.5 cm, 22 x 30 x 38 in.
WEIGHT .....	136 kg, 300 lb.

### MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAA5140P	Standard
KAA5140PM1	IEEE488.2/RS232