

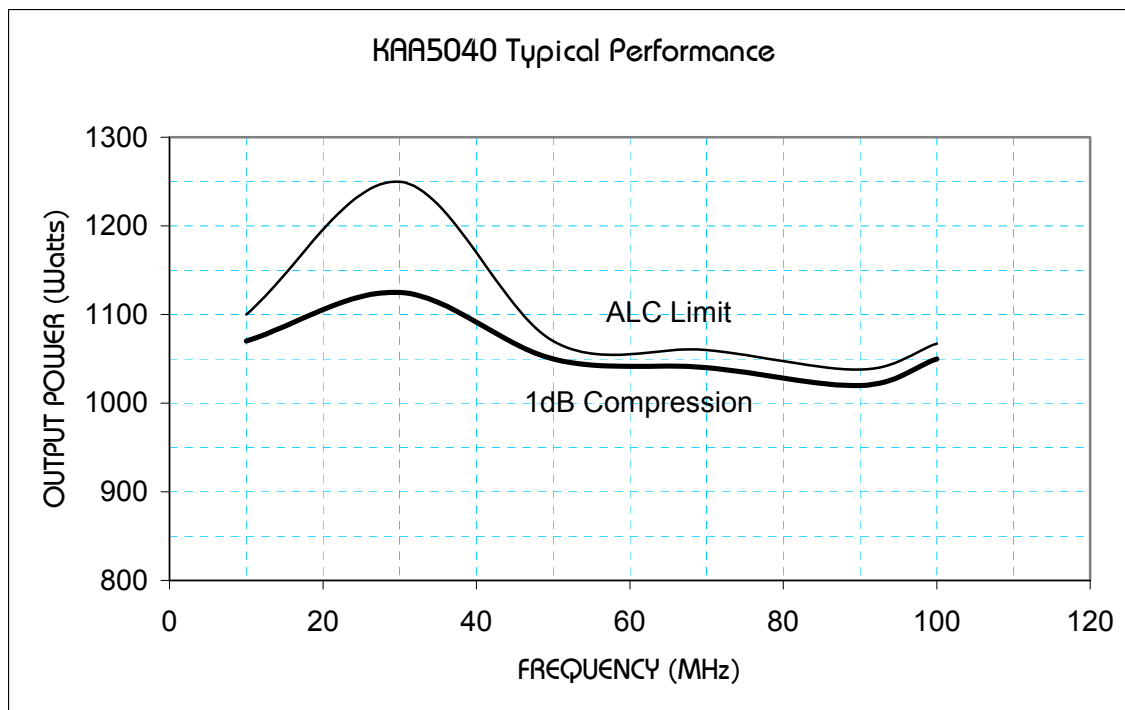
MODEL KAA5040
1000 WATTS CW
10 MHz - 100 MHz

The Model KAA5040 is a Class AB wideband RF power amplifier system delivering in excess of 1000 Watts CW power into a 50-Ohm load over the frequency range of 10 MHz to 100 MHz. Power gain is a minimum of 60 dB. GPIB control requires 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. On the basic model these features, plus remote power on/off control, are accessible for hard-wire 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 comprises an Amplifier Unit, a Power Controller Unit and a Power Supply Unit. These are installed into a standard, 19-inch equipment rack, 22 inches wide, 27 inches high, and 31 inches deep. Individual system components are installed on telescoping slides. The equipment rack is fitted with heavy-duty swivel casters. Each system component has integral forced-air cooling provided by highly reliable, impeller and/or tube-axial fans.

The Model KAA5040 uses switching-type power supply modules and operates from 187-265 V_{AC}, 47-63 Hz line. Power consumption is 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 KAA5040

RATED POWER OUTPUT	1000 Watts
INPUT FOR RATED OUTPUT	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION	1000 Watts minimum
FLATNESS	± 2.0 dB maximum unleveled, ± 0.5 dB leveled
FREQUENCY RESPONSE	10 MHz - 100 MHz instantaneously
GAIN	60 dB minimum
GAIN ADJUSTMENT RANGE	30 dB typical
INPUT IMPEDANCE	50 Ohm nominal
OUTPUT IMPEDANCE	50 Ohm nominal
MISMATCH TOLERANCE	infinite
PROTECTION	VSWR, over-temperature, overdrive
MODULATION CAPABILITY	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION	-10 dBc maximum
SPURIOUS OUTPUTS	-70 dBc maximum
FRONT PANEL METER	0 - 1000 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	180 - 265 V _r , 47 - 63Hz, single-phase, 5.0 kVA maximum
SIZE (W x H x D)	55.9 x 71.8 x 78.7 cm, 22 x 28¼ x 31 in.
WEIGHT	98 kg, 215 lb.

MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAA5040	Standard
KAA5040M1	IEEE488.2/RS232