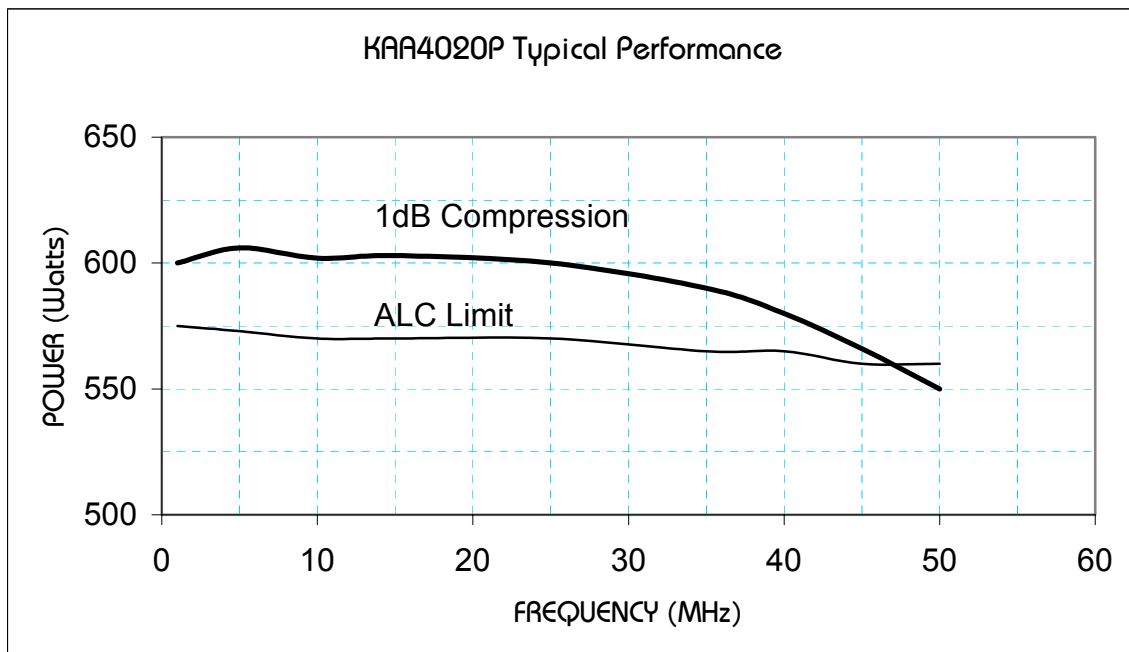


MODEL KAA4020P
500 WATTS CW
1 MHz - 50 MHz

The Model KAA4020P is a wideband RF pulse amplifier. The KAA4020P is a Class AB linear amplifier capable of 500 Watts pulsed output power into a 50-Ohm load over the frequency range of 1 MHz to 50 MHz. Power gain is 57 dB minimum. 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 mounted on the rear panel. For a detailed description of these features refer to "SPECIAL FEATURES – KAA & KAW-SERIES SINGLE BAND RF POWER AMPLIFIERS".

The Model KAA4020P is a 19-inch rack-mount unit, 8¾ inches high and 26½ inches deep. Construction is completely modular and all subassemblies are easily removable. Forced-air cooling is provided by a highly reliable impeller fan mounted on the rear panel. The unit uses a switching-type power supply module and operates from 95-265 V_{ac}, 47-63 Hz line. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.



SPECIFICATIONS
Model KAA4020P

RATED POWER OUTPUT	500 Watts Pulse
INPUT FOR RATED OUTPUT	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION	500 Watts minimum
FLATNESS	± 1.5 dB maximum unlevelled, ± 0.5 dB leveled
FREQUENCY RESPONSE	1 MHz - 50 MHz instantaneously
GAIN	57 dB minimum
GAIN ADJUSTMENT RANGE	20 dB typical
DUTY CYCLE	35%
PULSE WIDTH	1 ms maximum
SIGNAL RISE/FALL TIME	1 µs maximum
PULSE DROOP	1% maximum
GATING SPEED	0.3 µs maximum
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	-13 dBc maximum
SPURIOUS OUTPUTS	-70 dBc maximum
FRONT PANEL METER	0 - 500 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	95 - 265 V _r , 47 - 63Hz, single-phase, 400 VA average
SIZE (W x H x D)	48.3 x 22.2 x 67.3 cm, 19 x 8¾ x 26½ in.
WEIGHT	20.5 kg, 45 lb.

MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAA4020P	Standard
KAA4020PM1	IEEE488.2/RS232