

MODEL KAA3070
300 WATTS CW
100 MHz - 200 MHz

The Model KAA3070 is a Class AB wideband RF power amplifier delivering in excess of 300 Watts CW power into a 50-Ohm load over the frequency range of 100 MHz to 200 MHz. Power gain is a minimum of 55 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 Model KAA3070 is a 19-inch rack-mount unit, 7 inches high and 20 inches deep. Construction is completely modular; all subassemblies are readily removable. Forced-air cooling is by a highly reliable, tube-axial fan mounted on the rear panel. The amplifier operates from 95-132 or 187-265 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 KAA3070

RATED POWER OUTPUT	300 Watts
INPUT FOR RATED OUTPUT	1.0 mW maximum
FLATNESS	± 1.5 dB maximum unleveled, ± 0.5 dB leveled
FREQUENCY RESPONSE.....	100 MHz - 200 MHz instantaneously
GAIN	55 dB minimum
GAIN ADJUSTMENT RANGE.....	20 dB typical
INPUT IMPEDANCE.....	50 Ohm nominal
OUTPUT IMPEDANCE	50 Ohm nominal
MISMATCH TOLERANCE	infinite
PROTECTION	VSWR, over-temperature, overdrive
CLOSE-IN NOISE @ 20Hz RESOLUTION.....	-70dBc maximum
HARMONIC DISTORTION	-20 dBc maximum
SPURIOUS OUTPUTS.....	-70 dBc maximum
NOISE FIGURE	8 dB typical
FRONT PANEL METER	0 - 300 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 _~ , 47 - 63Hz, single-phase, 700 VA maximum
SIZE (W x H x D)	48.3 x 17.8 x 50.8 cm, 19 x 7 x 20 in.
WEIGHT	22.7 kg, 50 lb.

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