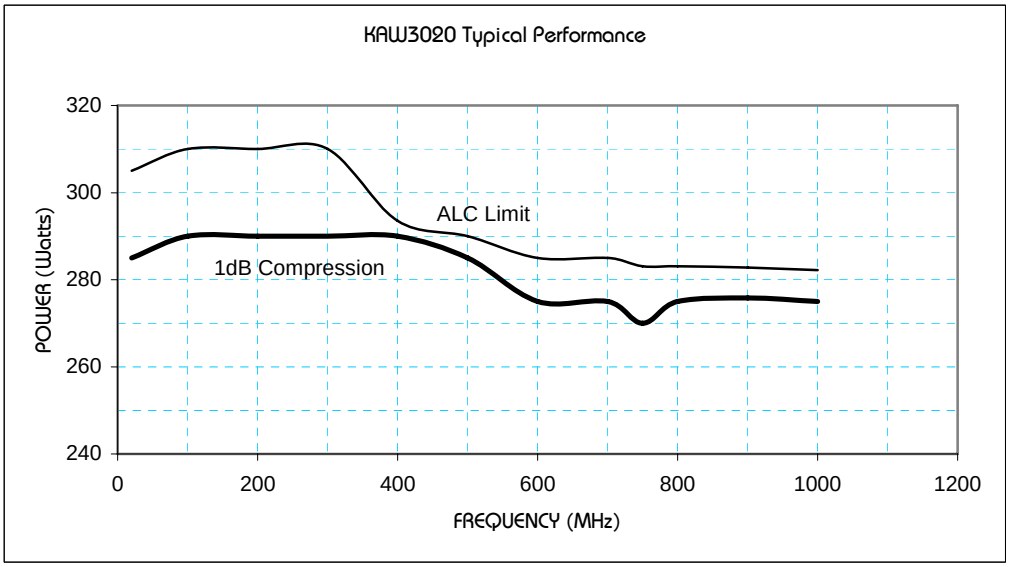
MODEL KAW3020
250 WATTS CW
20 MHz - 1000 MHz

The Model KAW3020 is a Class A wideband RF power amplifier system that delivers greater than 250 Watts CW power into a 50-Ohm load over the frequency range of 20 MHz to 1000 MHz. Power gain is a minimum of 54 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 and remote power on/off control can be accessed 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 and a Power Controller/Supply Unit. These are installed on telescoping slides into a standard 19-inch equipment rack, 22 inches wide, 23 inches high, and 38 inches deep. 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 KAW3020 uses switching-type power supply modules and operates from 187-265 V_{AC}, 47-63 Hz line. Power consumption is 3.0 kVA. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.



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SPECIFICATIONS
Model KAW3020

RATED POWER OUTPUT	250 Watts
INPUT FOR RATED OUTPUT	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION	250 Watts minimum
FLATNESS	± 2.5 dB maximum unleveled, ± 0.5 dB leveled
FREQUENCY RESPONSE	20 MHz - 1000 MHz instantaneously
GAIN	53 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	–26 dBc typical
SPURIOUS OUTPUTS	–70 dBc maximum
FRONT PANEL METER	0 - 250 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	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_{ac}, 47 - 63Hz, single-phase, 3.0 kVA maximum
SIZE (W x H x D)	55.9 x 63.61 x 96.5 cm, 22 x 25 x 38 in.
WEIGHT	105 kg, 230 lb.

MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAW3020	Standard
KAW3020M1	W/IEEE488.2/RS232
KAW3020M3	W/ Gating Circuitry & IEEE488.2/RS232

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