

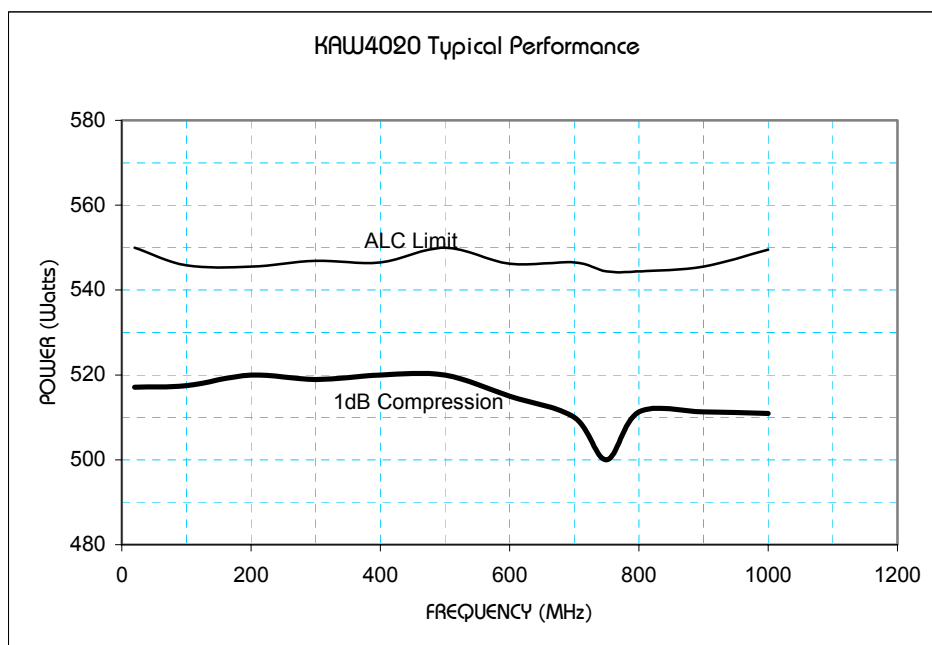
**MODEL KAW4020**  
**500 WATTS CW**  
**20 MHz - 1000 MHz**

The Model KAW4020 is a Class A wideband RF power amplifier system delivering in excess of 500 Watts CW power into a 50-Ohm load over the frequency range of 20 MHz to 1000 MHz. Power gain is a minimum of 57 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 two Amplifier Units, a Power Controller Unit and a Power Supply Unit. These are installed on telescoping slides into a standard, 19-inch equipment rack, 22 inches wide, 39 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 KAW4020 uses switching-type power supply modules and operates from 187-265 V<sub>AC</sub>, 47-63 Hz line. Power consumption is 7 kVA. Power consumption is 2.8 kVA. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.



## SPECIFICATIONS

### Model KAW4020

RATED POWER OUTPUT .....	500 Watts
INPUT FOR RATED OUTPUT .....	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION .....	500 Watts minimum
FLATNESS .....	± 2.5 dB maximum unleveled, ± 1.0 dB leveled
FREQUENCY RESPONSE .....	20 MHz - 1000 MHz instantaneously
GAIN .....	57 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
MODULATION CAPABILITY .....	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION .....	-26 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 .....	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 <sub>r</sub> , 47 - 63Hz, single-phase, 7.0 kVA maximum
SIZE (W x H x D) .....	55.9 x 71.8 x 78.7 cm, 22 x 28¼ x 31 in.
WEIGHT .....	218 kg, 480 lb.

## MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAW4020	Standard
KAW4020M1	IEEE488.2/RS232