

MODEL KAW6042

5000 WATTS CW

320-400 MHz

The Model KAW6042 is a Class AB wideband RF power amplifier system delivering in excess of 5000 Watts CW power into a 50-Ohm load over the frequency range of 320-400 MHz. Power gain is a minimum of 66 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 eight Amplifier Units, a Power Controller Unit, two Combiner units and two Power Supply Units. These are installed on telescoping slides into a standard double, 19-inch equipment rack, 44 inches wide, 51 inches high, and 28 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 KAW6042 uses switching-type power supply modules and operates from 208 V_{AC}, 47-63 Hz line, 3 phase. Power consumption is 20 kVA. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.

SPECIFICATIONS

Model KAW6042

RATED POWER OUTPUT	5000 Watts
INPUT FOR RATED OUTPUT	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION	5000 Watts minimum
FREQUENCY RESPONSE	320-400 MHz
GAIN	66 dB minimum
GAIN ADJUSTMENT RANGE	25 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	-40 dBc typical

SPURIOUS OUTPUTS.....	-70 dBc maximum
FRONT PANEL METER	0 -4000 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	Input: type N female, Output: 1 5/8 EIA Flange or customer specified
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	208 V _{ac} , 47 - 63Hz, 3 Phase, 20 kVA maximum
SIZE (W x H x D).....	111.9 x 124.7 x 96.7cm.; 44 x 49 x 38 in.
WEIGHT (approx.).....	495kg.; 1100 lb.

MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAW6042	Standard
KAW6042M1	IEEE488.2/RS232

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