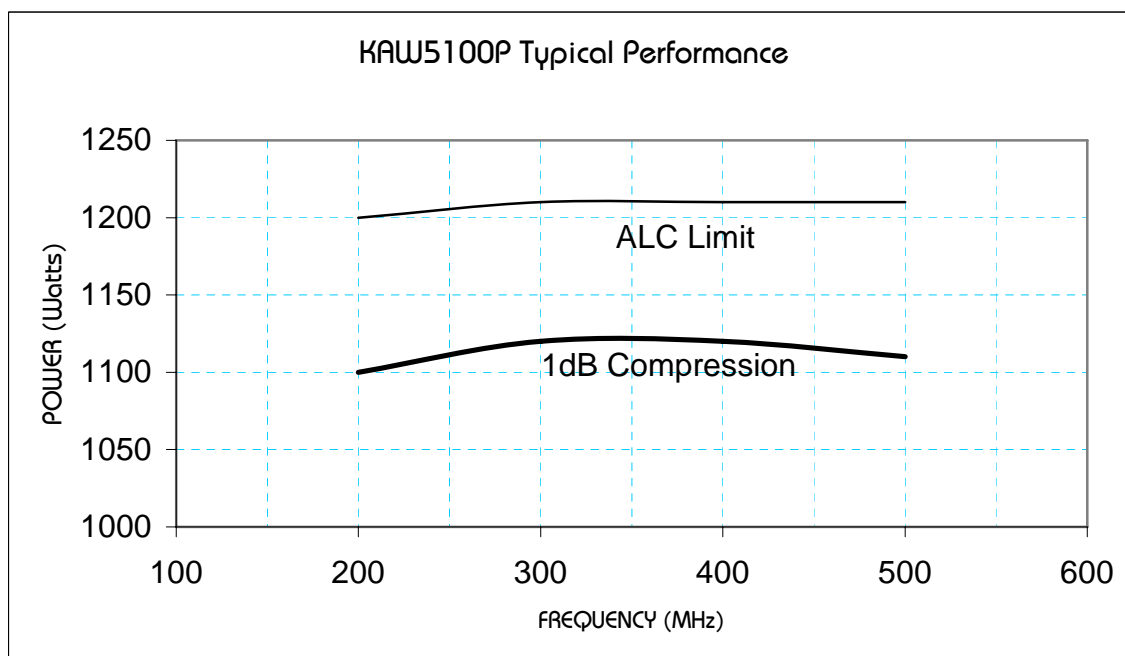


**MODEL KAW5100P
1000 WATTS PULSE
200 MHz - 500 MHz**

The Model KAW5100P is a wideband RF pulse amplifier system. The KAW5100P amplifier is a class AB linear pulse amplifier and provides 1000 Watts pulsed output power into a 50-Ohm load over the frequency range of 200 MHz to 500 MHz with a minimum power gain of 60 dB. 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. For a detailed description of these features refer to "SPECIAL FEATURES – KAA & KAW-SERIES SINGLE BAND RF POWER AMPLIFIERS".

The system comprises a Power Controller/Power Amplifier and a Power Supply unit. These are intended to be mounted into a standard, 19-inch equipment rack and require 21 inches of panel space. The units are designed to be installed on optional telescoping slides. The Model KAW5100P is self-contained and operates from single-phase 187-265 V_{AC}, or 3-phase 323-458 V_{AC}, 47-63 Hz line. Power consumption is typically 600 VA. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.



SPECIFICATIONS
Model KAW5100P

RATED POWER OUTPUT	1000 Watts pulse
INPUT FOR RATED OUTPUT	1.0 mW maximum
POWER OUTPUT @ 1dB COMPRESSION	1000 Watts minimum
FLATNESS	± 2.0 dB maximum unlevelled, ± 0.5 dB leveled
DUTY CYCLE	10%
PULSE WIDTH	10 ms maximum
PULSE DROOP	3% maximum
PULSE OVERSHOOT	5% maximum
SIGNAL RISE/FALL TIME	100 ns maximum
GATING SPEED	0.5 µs maximum
GATING ON/OFF RATIO	65 dB minimum
GATING SIGNAL	TTL, high = enabled (5K input imp.)
NOISE FLOOR (gated off)	15 dB typical above thermal noise
FREQUENCY RESPONSE	200 MHz - 500 MHz instantaneously
GAIN	60 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	-30 dBc maximum
SPURIOUS OUTPUTS	-70 dBc maximum
FRONT PANEL METER	0 - 1000 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	180 - 265 V _{AC} , 47 - 63Hz, 800 VA maximum
Size (H X W X D)	533 X 483 X 660 mm., 21 X 19 X 26 in
Weight (approx.)	64 kg, 140 lb.

MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAW5100P	Standard
KAW5100PM1	IEEE488.2/RS232

DOC # 7-98-913-001 REV B
