

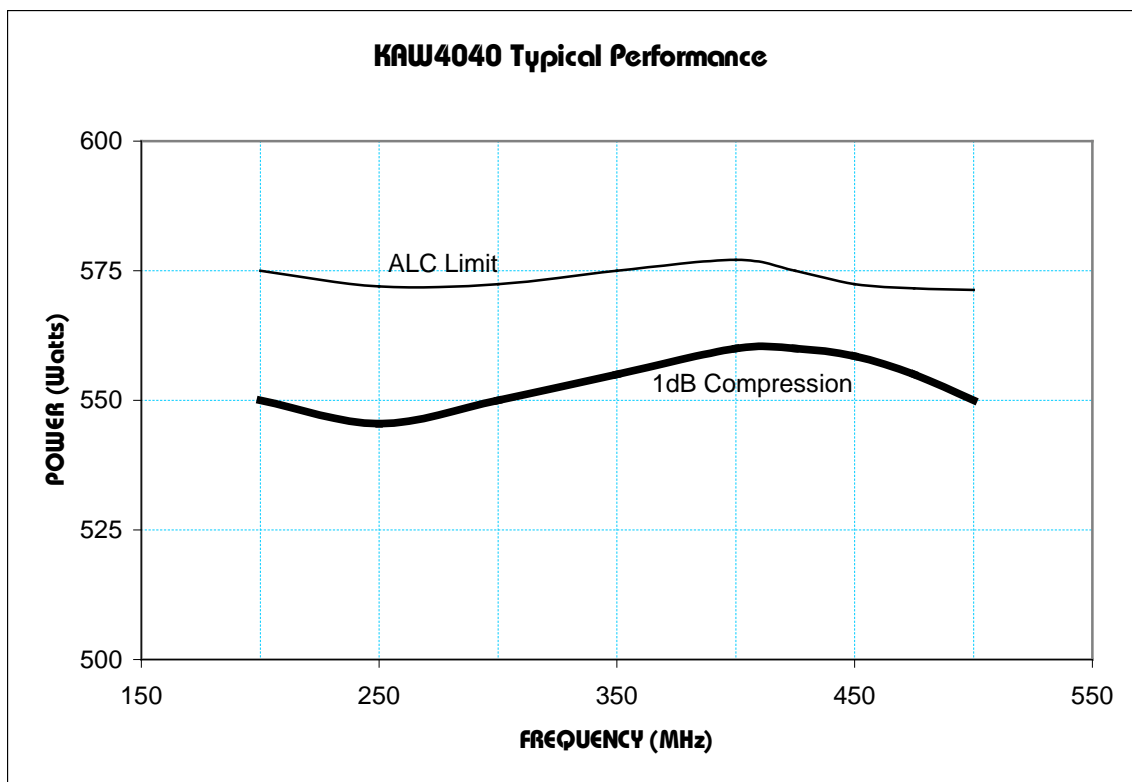


**MODEL KAW4040M12**  
**500 WATTS CW**  
**200 - 500 MHz, OPTIMIZED FOR 390 – 410 MHz**

The Model KAW4040M12 is a Class AB wideband RF power amplifier system delivering in excess of 500 Watts CW power into a 50-Ohm load over the frequency range of 200 MHz to 500 MHz with custom optimization over the 390 MHz – 410 MHz range. Power gain is a minimum of 57 dB.

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 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 15¾ inches of panel space. The units are designed to be installed on optional telescoping slides. The system operates from 187-265 V<sub>AC</sub> 47-63 Hz. 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 KAW4040M12**

<b>RATED POWER OUTPUT</b> .....	<b>500 Watts</b>
<b>INPUT FOR RATED OUTPUT</b> .....	<b>1.0 mW maximum</b>
<b>FLATNESS</b> .....	<b>± 2.0 dB maximum unlevelled, ± 0.5 dB leveled</b>
<b>FREQUENCY RESPONSE</b> .....	<b>200 MHz - 500 MHz instantaneously</b>
<b>FREQUENCY OPTIMIZATION</b> .....	<b>390 MHz – 410 MHz</b>
<b>GAIN</b> .....	<b>57 dB minimum</b>
<b>THIRD ORDER INTERCEPT POINT</b> .....	<b>64dBm (Over 390 MHz – 410 MHz)</b>
<b>GAIN ADJUSTMENT RANGE</b> .....	<b>30 dB typical</b>
<b>INPUT IMPEDANCE</b> .....	<b>50 Ohm nominal</b>
<b>OUTPUT IMPEDANCE</b> .....	<b>50 Ohm nominal</b>
<b>MISMATCH TOLERANCE</b> .....	<b>infinite</b>
<b>PROTECTION</b> .....	<b>VSWR, over-temperature, overdrive</b>
<b>MODULATION CAPABILITY</b> .....	<b>Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal</b>
<b>HARMONIC DISTORTION</b> .....	<b>-20 dBc maximum</b>
<b>SPURIOUS OUTPUTS</b> .....	<b>-70 dBc maximum</b>
<b>FRONT PANEL METER</b> .....	<b>0 - 500 Watt forward power, top scale % limit SET point reflected power, bottom scale</b>
<b>CONTROLS</b> .....	<b>[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</b>
<b>INDICATORS</b> .....	<b>SYSTEM, BLANKING, [METER]MODE, [ALC] MODE, VSWR, TEMP, REMOTE ACTIVE</b>
<b>REMOTE INTERFACE (optional)</b> .....	<b>IEEE-488.2 &amp; RS-232</b>
<b>RF CONNECTORS</b> .....	<b>Type N female</b>
<b>REMOTE CONTROL</b> .....	<b>IEEE488.2: 24-pin female, RS-232: 25- pin D-Subminiature female</b>
<b>REMOTE INTERLOCK</b> .....	<b>BNC female</b>
<b>OPERATING TEMPERATURE</b> .....	<b>-10 to 40 °C</b>
<b>COOLING</b> .....	<b>Forced air (self contained fans)</b>
<b>PRIMARY POWER</b> .....	<b>187 - 265 V<sub>r</sub>, 47 - 63Hz, single-phase, 2.8 kVA maximum</b>
<b>SIZE (W x H x D) Total with units stacked</b> .....	<b>48.3 x 40 x 70 cm, 19 x 15¾ x 27½ in.</b>
<b>WEIGHT (Approx. total)</b> .....	<b>75 kg, 165 lb.</b>

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**REV A**