

MODEL KAW2180M1 (RS)
100 WATTS CW
100 kHz - 1100 MHz

The Model KAW2180M1 (RS) is a Class A wideband RF power amplifier delivering in excess of 100 Watts CW power into a 50-Ohm load over the frequency range of 100 kHz to 1000 MHz with derated power from 1000 MHz to 1100 MHz. Power gain is a minimum of 50 dB. GPIB control (IEEE488.2/RS232 Interface Controller Module) is included.

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 – 2-BAND RF POWER AMPLIFIERS".

The Model KAW2180M1 (RS) is a 19-inch rack-mount unit, 8¾ inches high and 26½ inches deep. Construction is completely modular; all subassemblies are readily removable. Forced-air cooling is by a highly reliable, tube-axial fan mounted on the rear panel. The amplifier operates from 95-132 or 187-265 V_{AC}, 47-63 Hz line. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.

SPECIFICATIONS
Model KAW2180M1 (RS)

RATED POWER OUTPUT	100 Watts (100 kHz to 1000 MHz, 1dB compression Typical)
.....	1000 & 1100 MHz derated power from 100 – 10 Watts
INPUT FOR RATED OUTPUT	1.0 mW maximum
FLATNESS	± 2.5 dB maximum unleveled, ± 0.5 dB leveled * @ 100 KHZ – 200 MHZ; * @ 80 – 1000 MHZ
FREQUENCY RESPONSE.....	100 kHz - 1100 MHz (coaxially switched) Band 1: 100 kHz to 200 MHz Band 2: 80 MHz to 1100 MHz
GAIN	50 dB minimum * @ 80-1000MHZ
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	-15 dBc maximum
SPURIOUS OUTPUTS.....	-70 dBc maximum
FRONT PANEL METER	0 - 100 Watt forward power, band 1, top scale 0 - 100 Watt forward power, band 2, bottom scale
CONTROLS	[AC LINE]ON/OFF, [RF CTRL]ON/OFF (blanking) [RF BAND]HIGH/LOW, [ALC]FAST/SLOW (Autom. Level Control) [VSWR]RESET MAN/AUTO, ALC, RF GAIN
INDICATORS	SYSTEM, BLANKING, HIGH band, LOW band, ALC MODE, VSWR, TEMP, REMOTE ACTIVE
REMOTE INTERFACE (included).....	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	95 - 265 V _~ , 47 - 63Hz, single-phase, 1350 VA maximum
SIZE (W x H x D)	48.3 x 17.8 x 45.7 cm, 19 x 8¾ x 26½ in.
WEIGHT	34.1 kg, 75 lb.

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