



MODEL KMW2050
200 WATTS CW
225 MHz - 400 MHz
JITC Certified

The Model KMW2050 is a general purpose, UHF Power Booster for signals in the 225 to 400 MHz frequency range. No tuning, band switching, or adjustments of any kind are required to operate this unit. Maximum power output is in excess of 200 Watts into a 50 Ohm load and will provide full output power with a 2:1 maximum load VSWR. Maximum power output may be selected from the front panel to be limited to 50, 100, 150 or 200 Watts. Output power is indicated on a 10-segment bar graph. Automatic level control (ALC) maintains the maximum power output at the level selected.

Power gain is a minimum 22 dB, providing for full power output with 1.5 Watts input. Input power may vary from 1.5 to 25 Watts for full output. When the input power exceeds this, an overdrive indication is given on the front panel and the amplifier reverts to the by-pass mode.

Transmit/Receive switching is automatic and is initiated by an RF input power of approximately 1 Watt or greater. The unit reverts to the receive mode when the input is removed. The switching times are DAMA and HPW compatible, the unit is JITC certified.

The unit is protected against excessive load VSWR and an excessive VSWR condition is indicated on the front panel. Forced-air cooling is supplied by two tube-axial fans. An over temperature indicator is provided on the front panel and the unit reverts to by-pass mode until it cools and auto restores.

The antenna connection is normally made through an N-type female connector located on the rear panel. This connector may easily be relocated to the space provided for it on the front panel at any time.

- Radio Vendor independent design, single and multi-band radio compatible with just an RF connection
- Full 200w across the 225 to 400 MHz band
- Low input power for full 200W output
- DAMA capable
- Compatible with 1-5 Watt and 10 -20 Watt tactical radios
- 3 year Warranty from a company with 30+ years in the business.



GENERAL SPECIFICATIONS

RF SENSING THRESHOLD	<1.5 Watts switches from Receive to Transmit
CONTROLS	RF OUTPUT (level select), FM PREAMP
INDICATORS (LED)	SYSTEM ON, TEMP, VSWR, DRIVE
METERING (output power)	10-segment bar graph
RF CONNECTORS (input & Ant.)	N-type jack w/dust cap
SUPPLY REQUIREMENTS	28 VDC @ 25 A nominal for 200 Watt out



modular rf

TRANSMIT

FREQUENCY RANGE	225 - 400 MHz
OUTPUT POWER	50, 100, 150 or 200 Watts, switch selectable
INPUT POWER	1.5 to 25 Watts for full output
INPUT/OUTPUT IMPEDANCE	50 Ohm nominal
INPUT VSWR	1.5:1 maximum
HARMONIC DISTORTION	-60 dBc typical
SPURIOUS EMISSIONS	-60 dBc maximum @ 200 Watts
DUTY CYCLE	Tactical Operations

RECEIVE

FREQUENCY RANGE	240-270 MHz w/preamp on; 225-400 MHz w/preamp off
GAIN	16 dB typical (preamp on, FM only)
NOISE FIGURE	≤5.5 dB
INSERTION LOSS	≤0.7 dB; Bypass mode
BANDPASS FILTER RESPONSE	±1 dB (240–270 MHz); >50 dB down 223 & 290 MHz

ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE	-20 °C to +50 °C
ALTITUDE (operating)	200 Watt to 6000 ft; 150 Watt to 10,000 feet
HUMIDITY	Up to 95% non-condensing

MECHANICAL SPECIFICATIONS

SIZE (WxHxD)	11.43 x 21.0 x 39.4 cm; 4.5 x 8.25 x 15.5 in
WEIGHT	5.45 kg, 12 lb
COOLING	Natural convection required
FINISH	Painted matte black w/screening white



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