



**MODEL KMW1030M6**  
**20 WATTS**  
**30 MHz - 512 MHz, Multi-Band**  
**Manual Band-Switching**

The Model KMW1030M6 is a portable, lightweight, waterproof RF booster amplifier for multi-band VHF/UHF Tactical Radio equipment employing legacy, proprietary and emerging waveforms. The amplifier covers the frequency band of 30-512 MHz using six filters to assure acceptable harmonic distortion levels. With proper operation, the KMW1030M6 is Mil Std 461E Compliant. The amplifier includes Voltage Spike Suppression, RF sensing, T/R switching, Automatic Level Control (ALC), six harmonic filter bands, and protection against antenna mismatch and over-temperature. The unit may be operated locally or remotely and may be powered from two BA-5390, UBI-2590, or similar batteries; or vehicle power. Protection against accidental polarity reversal is provided. Zero current usage on standby, extends battery life in field use. The amplifier comprises a 2-piece aluminum case with slotted openings to allow strapping the unit to the body. Optional cables are available.

- Radio Vendor independent design. Single and multi-band radio compatible with just an RF connection
- Full 20W across the entire 30 – 512MHz band
- Low input power for full 20W output
- Zero current draw in “standby” mode
- Waterproof (submersible)
- Battery and Vehicle power compatible, 24 volt systems, filtered and transient protected
- 3 year Warranty from a company with 30+ years in the business



**GENERAL SPECIFICATIONS**

FREQUENCY RANGE	30 MHz – 512 MHz
POWER OUTPUT	20 Watts
INPUT POWER	2 Watts typical for 20 Watts output, 10 Watts max
RF KEYING SENSITIVITY	1 Watt CW typical
T/R SWITCHOVER TIME	< 250ms (<50ms typical @ 5W input)
INSERTION LOSS	1.0 dB maximum
MODULATION	AM, FM, or PM
DUTY CYCLE	10% Transmit
INPUT/OUTPUT IMPEDANCE	50 Ohm nominal
INPUT VSWR	1.5:1 maximum
HARMONICS	-60 dBc typical
SPURIOUS OUTPUTS	-70 dBc maximum
POWER REQUIREMENT	24 VDC @ 6A –Transmit, zero current on standby 24V Vehicle Power Compatible
INPUT VOLTAGE RANGE	19 – 32 VDC

**ENVIRONMENTAL SPECIFICATIONS**

OPERATING TEMPERATURE	-30 to +60 °C
ALTITUDE (operating)	10,000 m
IMMERSION (water)	66 ft for 20 min
VIBRATION / SHOCK / HUMIDITY	Per Mil Std 810E



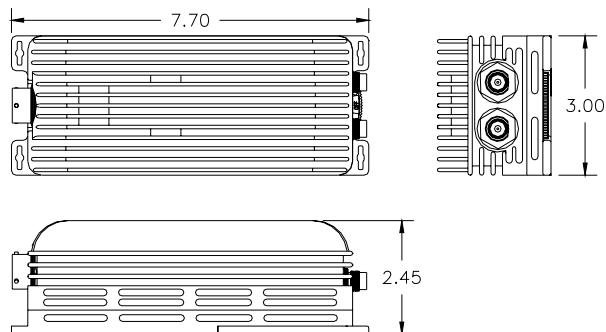
## modular rf

### MECHANICAL SPECIFICATIONS

SIZE (WxHxD)	3.00" x 2.45" x 7.70"
WEIGHT	2 lb. 5 oz
COOLING	Natural convection required
RF CONNECTORS	TNC female
DC & CONTROL CONNECTOR	Multi-pin connector - (Mating Connector Supplied)
CONSTRUCTION	Aluminum housing with integral heatsink

### OPTIONAL EQUIPMENT

BC1030	Battery Cable (22" cable connecting KMW1030 Series to two BA-5390, two UBI-2590, or similar batteries)
VC1030	Vehicle Power Cable (120" cable with NATO slave plug for vehicle use)
RC1030	Radio Cable (96" cable connecting radio output to amplifier input)
AC1030	Antenna Cable (96" cable connecting amplifier output to antenna input)



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