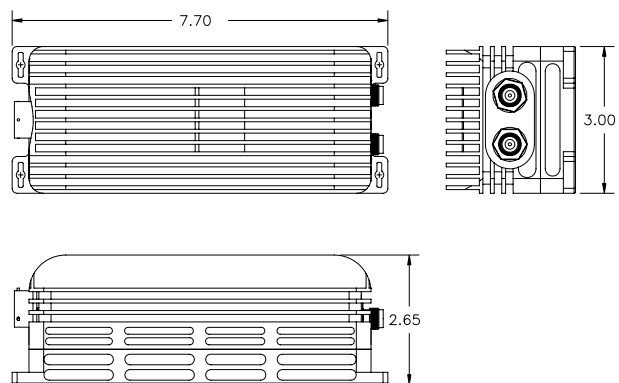
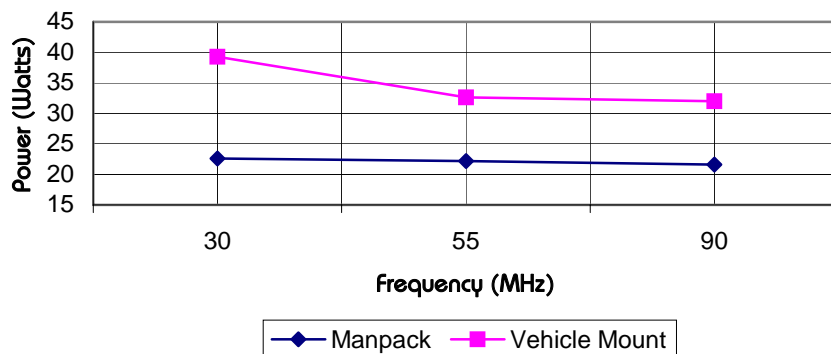


MODEL KMW1032HP (HIGH POWER)
20 WATTS MANPACK, 40 WATTS VEHICLE MOUNTED
30 MHz - 88 MHz SINGARS VHF Amplifier
Automatic Band-Switching

The Model KMW1032HP is a portable, lightweight, waterproof, fully automatic band-switching RF booster amplifier for use with SINGARS VHF Tactical Radio transceivers. The amplifier covers the frequency band of 30-88 MHz using filters to assure acceptable harmonic distortion levels and is SINGARS compatible. Standard 20 Watt output is increased to 40 Watts using the AR Modular RF vehicle cable. The amplifier includes Voltage Spike Suppression, RF sensing, T/R switching, Automatic Level Control (ALC), automatically switched harmonic filters, and protection against antenna mismatch and over-temperature. The unit may be operated from two BA5590 batteries or vehicle power. Normal operating time using two BA5590 batteries is approximately 15 hours. Protection against accidental polarity reversal is provided. Very low current usage on standby due to "sleep mode" extends battery life in field use. The amplifier comprises a rugged 2-piece aluminum case with slotted openings to allow strapping the unit to the body. Optional cables and vehicle mounting kit are available.



KMW1032HP Output Power
Manpack & Vehicle Applications



Preliminary

SPECIFICATIONS

FREQUENCY RANGE.....	30 MHz – 88 MHz
AUTO SWITCHING FREQUENCY BANDS.....	Band 1: 30 MHz - 45 MHz
.....	Band 2: 45 MHz - 70 MHz
.....	Band 3: 70 MHz – 88 MHz
POWER OUTPUT.....	25 Watts Typical (20 Watts min) Manpack
	40 Watts Typical (30 Watts min) Vehicle Mounted
INPUT POWER.....	Up to 5 Watts max for rated power
RF KEYING SENSITIVITY.....	1 Watt typical
T/R & FILTER SWITCHOVER TIME	SINCGARS Compatible
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	-63 dBc typical Per Mil Std 461E, CE 106
SPURIOUS OUTPUTS.....	-60 dBc maximum
POWER REQUIREMENT	24 VDC @ 5 - 7A Transmit, <0.015A Sleep Mode
.....	24V Vehicle Power Compatible
INPUT VOLTAGE RANGE.....	19 – 32 VDC
OPERATING TEMPERATURE	-30 to +60 °C
RF CONNECTORS.....	TNC female
DC & CONTROL CONNECTOR	Multi-pin connector (Mating Connector Supplied)
COOLING	Natural convection required
CONSTRUCTION.....	Aluminum housing with integral heatsink
ALTITUDE (operating).....	10,000 m
IMMERSION (water).....	66 ft for 20 min
VIBRATION / SHOCK / HUMIDITY.....	Per Mil Std 810E
SIZE (WxHxD).....	3.00" x 2.65" x 7.70"
WEIGHT.....	2 lb. 5 oz

OPTIONAL EQUIPMENT

BC1030	Battery Cable (18" cable connecting KMW1030 Series to two BA5590 batteries)
VC1030HP	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)
VMK1031	Vehicle Mounting Kit (Vehicle mounted sleeve for holding KMW1032HP)

DOC # 7-98-XXX-XXX REV DATE: -
