

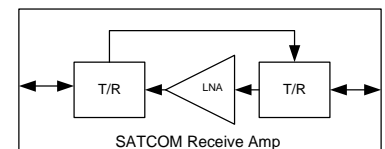
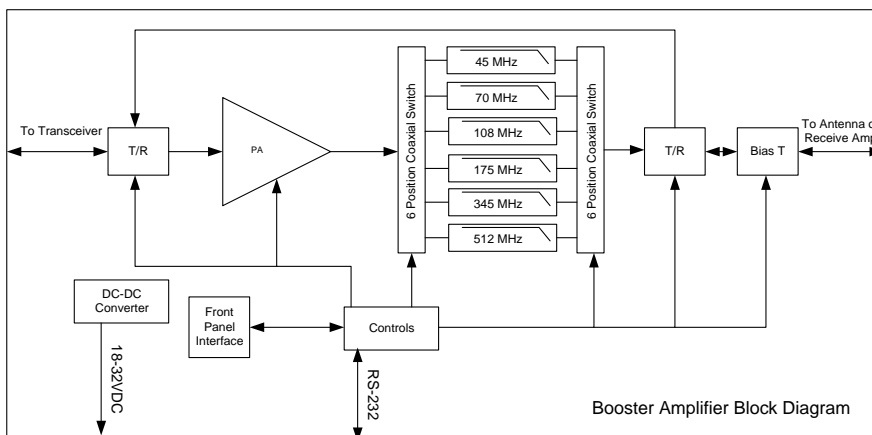
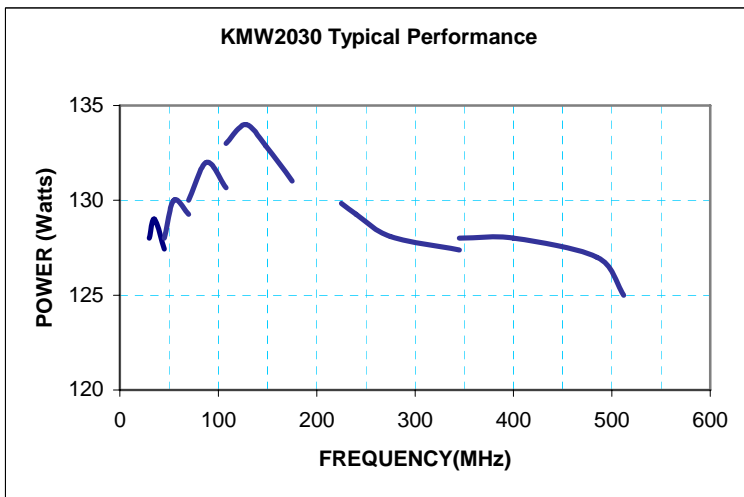
**MODEL KMW2030**  
**125 WATTS CW**  
**30 MHz - 512 MHz**

The AR Worldwide Model KMW2030 is an AM/FM-UHF/VHF DAMA amplifier for signals in the 30 to 512 MHz frequency range, with an optional external low-noise pre-amplifier for use in the UHF SatCom mode.

Operation of the amplifier requires only MODE and POWER LEVEL selection. The amplifier provides transmit power on the UHF SatCom, UHF Line-of-Sight and VHF LOS bands. The amplifier supports the UHF SatCom band for both Mil-Std 188-182, 5kHz and Mil-Std 188-183, 25 kHz DAMA and 188-181, Non-DAMA, with or without the optional external preamplifier, and supports both HPW and Mil-Std 181B waveforms. PIN-DIODE T/R switching ensures DAMA/HPW switching time requirements and UHF CO-SITE filtering eliminates interference from adjacent transmitters.

The amplifier is protected against antenna mismatch, over-temperature, excessive current draw, and DC power mismatch. LED indicators show output power, VSWR, temperature and input drive fault conditions. External connections are limited to RF input; RF output, DC power, and RS232 control lines.

The amplifier is self-contained, splash proof, and designed for military ground, vehicular and aircraft tactical operations. It is protected against antenna mismatch and high VSWR. The amplifier is available in matte black only. The optional external pre-amplifier is waterproof and is powered via a single RF cable.



DOC # 7-98-855-000  
 REV: C

**UHF SATCOM/DAMA TX, HPW & Mil Std 181B waveform:**

FREQUENCY RANGE ..... 225-512 MHz

**UHF SATCOM/DAMA RX:**

FREQUENCY RANGE.....243-345 MHz                      OPTIONAL PRE-AMPLIFIER GAIN.....12 dB minimum  
 NOISE FIGURE.....<2 dB typical                      OUT-OF-BAND REJECTION.....-70 dB

**UHF LOS:**

FREQUENCY RANGE ..... 225-512 MHz

**VHF LOS:**

FREQUENCY RANGE ..... 30-174 MHz  
 OUT-OF-BAND REJECTION.....-70 dB

**FILTER BANDS**

Band 1 ..... 30-45 MHz	Band 4..... 108-174 MHz
Band 2 ..... 45-70 MHz	Band 5..... 225-345 MHz
Band 3 ..... 70-108 MHz	Band 6..... 345-512 MHz

**GENERAL SPECIFICATIONS**

TX FREQUENCY RANGE..... 30-512 MHz  
 POWER OUTPUT ..... 50, 75, 100, 125 Watts selectable, 32.5 Watts AM Carrier  
 ALC FLATNESS ..... 30-400 MHz  $\pm 1$  dB, 400-512 MHz +1 / -2 dB  
 INPUT POWER..... 2 to 20 Watts minimum for full output power  
 RF SENSE THRESHOLD ..... < 1 Watt for Receive-Transmit switchover  
 INPUT/OUTPUT IMPEDANCE ..... 50 Ohm  
 INPUT VSWR ..... 1.5:1 maximum  
 LOAD VSWR ..... 2:1 maximum for full output power  
 HARMONICS ..... -65 dBc typical  
 RECEIVE INSERTION LOSS..... < 2 dB  
 CONTROLS ..... MODE SELECT, POWER SELECT  
 INDICATORS..... LED-type; SYSTEM on, VSWR, TEMP, DRIVE  
 OUTPUT METER..... 10-Segment Bar Graph  
 RF CONNECTORS ..... N female  
 PRIMARY POWER..... 19-32 V DC  
 POWER CONSUMPTION OVER VOLTAGE RANGE..... 826 Watts @ 24 V DC  
 WEIGHT ..... 17 lb. maximum  
 SIZE (H X W X D) ..... 5 X 7 X 13.5 in.  
 REMOTE OPERATION ..... RS232 control  
 DUTY CYCLE ..... 25%  
 ENVIRONMENTAL GENERAL ..... Certified to meet US Army requirements of MILSPEC 810F  
 TEMPERATURE OPERATING/STORAGE/SHOCK ..... Method 501.4, -20 to 50 °C / -40 to 70 °C and Shock Method 503.4  
 SHOCK AND VIBRATION ..... Methods 514.5 and 516.5  
 ALTITUDE OPERATING/STORAGE/DECOMPRESSION ..... Methods 500.4 and Decompression 500.4  
 MOISTURE RESISTANCE, HUMIDITY & SALT SPRAY..... Methods 507.4 and 509.4 Amplifier is water splash proof. Pre-amplifier leak proof to 30 min. @ 1m under water.  
 SAND AND DUST ..... Method 510.4  
 LIGHTING REQUIREMENTS OPERATING ..... Fully operable under all ambient light conditions. Fully operable with generation III night vision goggles.