

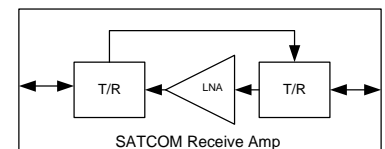
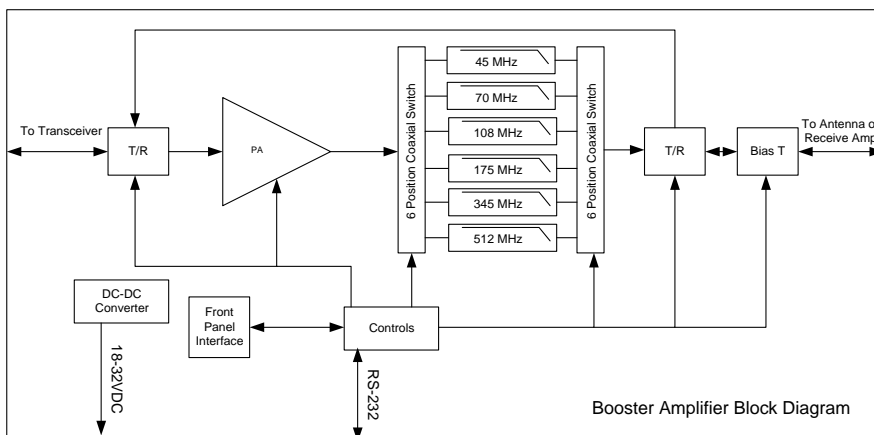
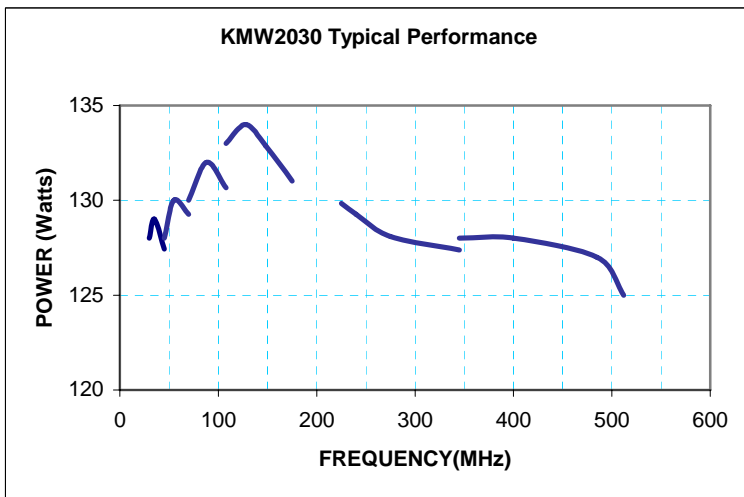
MODEL KMW2030
125 WATTS CW
30 MHz - 512 MHz

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 ± 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.