modular rf

MODEL AR-75
75 WATTS
30 MHz - 512 MHz, Multi-Band
Automatic Band-Switching/LNA with Co-Site Filter

The Model AR-75 is a portable, lightweight, fully automatic band-switching 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 automatically switched filters to assure low harmonic distortion levels and is SINCGARS, HPW, HAVEQUICK and ECCM compatible. The AR-75 is designed for operation from 18 to 36 Volts. The amplifier includes Voltage Spike Suppression for vehicle applications, RF sensing, T/R switching, Automatic Level Control (ALC), six automatically switched harmonic filter bands, and protection against antenna mismatch and over-temperature. Protection against accidental polarity reversal is provided. Optional cables and vehicle shock mounting kit are available.

- Radio Vendor independent design, single and multi-band radio compatible with just an RF connection
- Low RF input power 5-7 Watts
- Three selectable output power levels for SATCOM use
- Selectable LNA with more than 45 dBc co-site signal suppression on SATCOM Rx band
- Complete independent system, full system operability with or without remote control.
- High speed filter switching in SINCGARS, HAVEQUICK and ECCM modes to assure compatible interference free operation across the whole frequency band to help prevent "friendly jamming" of nearby systems
- 24 volt system, filtered and transient protected (MIL-STD 1275).
- DAMA compatible
- Waterproof IP67
- 3 year Warranty from a company with 35+ years in the business.

GSA Schedule
Contract GS-07F-0371U

GENERAL SPECIFICATIONS

FREQUENCY RANGE	30 MHz – 512 MHz
POWER OUTPUT	30-320 MHz 75 Watts CW nominal; 75W PEP with 80% AM modulation; <10% distortion 320-512 MHz 50 Watts CW/PEP
INPUT POWER RANGE CW	5-7 Watts CW typical for 75 Watts Output; input protection to 20W CW without damage
INPUT POWER RANGE AM	5 Watts PEP typical for 75 Watts PEP 30-320 MHz 50 Watts PEP 320-512 MHz
RF KEYING SENSITIVITY	1 Watt typical
T/R & FILTER SWITCHOVER TIME	SINCGARS, HAVEQUICK, HPW, and DAMA compatible
INSERTION LOSS BYPASS MODE	<1.0 dB typical
INSERTION LOSS ACTIVE RX	1.5 dB nominal
MODULATION	AM/FM/PM, HAVEQUICK, HPW, SINCGARS and other JTRS waveforms
DUTY CYCLE	Tactical operations
INPUT/OUTPUT IMPEDANCE	50 Ohm nominal
INPUT VSWR	1.5:1 typical
HARMONICS	Better than -60 dBc typical. Full Band high speed filter switching avoids interference in SINCGARS, HAVEQUICK, and ECCM Modes
SPURIOUS OUTPUTS	-75 dBc typical
Rx LNA GAIN	10 dB typical
Rx LNA NOISE FIGURE	3 – 3.5 dB typical
Rx CO-SITE FILTER	Band pass frequency 239 – 273 MHz, Out of band rejection 45 dB typical
POWER REQUIREMENT	18 - 36 VDC filtered and transient protected for 12 or 24 volt vehicle systems
CURRENT	11 Amps @ 24V typical

ar modular rf
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ENVIRONMENTAL SPECIFICATIONS

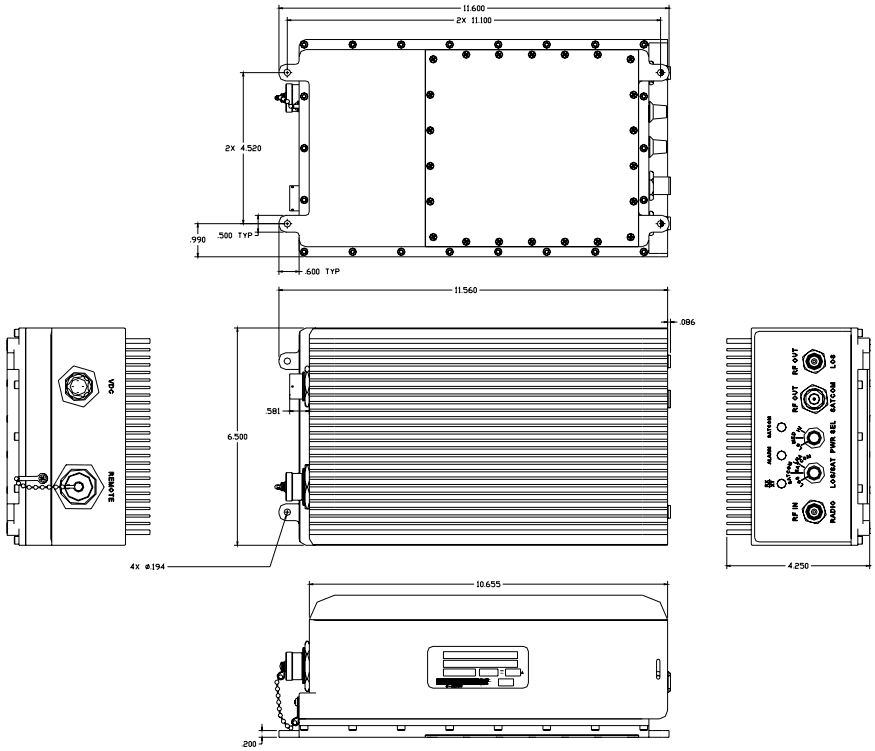
OPERATING TEMPERATURE	-20 to + 50 ºC
ALTITUDE (operating)	15,000 ft
IMMERSION (water)	IP67
VIBRATION / SHOCK / HUMIDITY/ENVIRO	Designed to meet applicable sections of Mil Std 810F/designed for ground/base vehicle use

MECHANICAL SPECIFICATIONS

SIZE (HxWxD)	4.25” x 6.5” x 11.7”
WEIGHT	12.5 lbs
COOLING	Natural convection required
RF CONNECTORS	RF Input (Radio) – TNC Female; RF Output (LOS) – TNC Female ; SATCOM – N-Type
DC & CONTROL CONNECTOR	Multi-pin connector (Mating Connector Supplied)
CONSTRUCTION	Sealed water resistant aluminum housing with integral heatsink

OPTIONAL EQUIPMENT

AR-75R	Remote control head for AR-75



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Made in USA