

Tactical Booster Amplifiers

Military, Homeland Security & First Responders

The Leading Supplier of Booster Amplifiers for
Tactical Military Radios
(30-512 MHz)

- 20 Watts
- 35 Watts
- 50 Watts
- 75 Watts
- 125 Watts
- 200 Watts

JITC Certified



Above & Beyond

In hostile environments dependable communications is vital. Lives depend on it. That's why the U.S. Army, Navy, Marines, Air Force and Coast Guard depend on booster amplifiers from AR Modular RF. They're designed smart, built tough, and easy to operate.

AR Modular RF booster amps cover the frequency (30-512 MHz and HF, VHF, and UHF bands) and supports modern tactical waveforms.

AR Modular RF has over 35 years of experience in RF and utilizes that knowledge with the latest technology to deliver one of the most advanced booster amplifiers available in the market today. These Battle Tested booster amplifiers are lightweight and compact. Every model incorporates RF sensing circuits to switch from Receive to Transmit. They all include Automatic Level Control, low pass harmonic or band pass filters, protection against antenna mismatch (VSWR) and overheating.

Bottom line? They do the job and go the distance. Through shock, vibration, extreme temperatures and even water. When troops have to go through hell and high water, these are the booster amps that go with them.



AR-50 Actual Size

Modules and Amplifier Systems for Electronic Warfare

Modules and systems are available from 12 to 5,000 Watts. With all the features you need to dominate in EW, ECM and ECCM.

RF Jammer Amplifiers

(10-2700 MHz) for both portable and vehicle-mounted systems.
From a few Watts to a few hundred Watts!

Quality. Better Warranty.

AR delivers innovative technology, advanced design, quality build & workmanship, mismatch capability, durability, less cost watt for watt, and a worldwide support network that is here for you today, tomorrow, and always. Everything we sell is backed by the best comprehensive warranty in the industry.

"New" KMW1031KT

The KMW1031 amplifier is now available as a complete kit!
The KMW1031 kit includes amplifier, 30-512 MHz antenna, RF cables, battery cable and tactical vest pouches for both the amp and the antenna. The KMW1031KT is the "lightest" 20 Watt amplifier kit on the market weighing less than 2.5 lbs.

GSA Schedule Available.

Visit GSA Advantage today (GS-07F-0371U).

Tactical Radios Supported:

Harris PRC-117F
Harris PRC-117G
Harris PRC-152
Thales MBITR PRC-148
Raytheon PSC-5D
ARC-210
Plus Others





NEW



NEW

| Feature | KMW1031 | AR-35 | AR-50 |
|---------------------------------|--|--|--|
| Frequency Range | 30 - 512 MHz | 30 - 512 MHz | 30 - 512 MHz |
| Power Output | 20 Watts CW 20 Watts PEP | 35 Watts CW 35 Watts PEP | 50 Watts CW 50 Watts PEP |
| Selectable Output Power Switch | n/a | n/a | Yes |
| Input Power | <2W typical, 10W max without damage | <2W typical, 10W max without damage | < 5W typical, 20W max without damage |
| RF Key Sensitivity | 1 Watt | 1 Watt | 1 Watt |
| T/R Switchover Time | SINGARS, HAVEQUICK Compatible, HPW and DAMA capable | SINGARS, HAVEQUICK Compatible, HPW and DAMA capable | SINGARS, HAVEQUICK Compatible, HPW and DAMA capable |
| SATCOM Rx LNA | External LNA available | External LNA available | Built-in |
| SATCOM Rx LNA Gain/Noise Figure | 12 dB/3 dB nominal | 12 dB/3 dB nominal | 12 dB/3 dB nominal |
| SATCOM Rx Co-site Filter | -35 dB nominal | -35 dB nominal | -35 dB nominal |
| Insertion Loss (Bypass) | 1.5 dB nominal | 1.5 dB nominal | 1.5 dB nominal |
| Modulation | AM/FM/PM, HAVEQUICK, SINGARS and other JTRS waveforms | AM/FM/PM, HAVEQUICK, SINGARS and other JTRS waveforms | AM/FM/PM, HAVEQUICK, SINGARS and other JTRS waveforms |
| Duty Cycle | Tactical operations | Tactical operations | Tactical operations |
| Input/Output Impedance | 50 Ohm nominal | 50 Ohm nominal | 50 Ohm nominal |
| Input VSWR | 1.5:1 nominal | 1.5:1 nominal | 1.5:1 nominal |
| Harmonics | -60 dBc typical | -60 dBc typical | -60 dBc typical |
| Spurious Outputs | -70 dBc | -70 dBc | -70 dBc |
| Power Requirements | 12-33 VDC, from Battery or 12 and 24 VDC vehicle systems, filtered and transient protected | 12-33 VDC, from Battery or 12 and 24 VDC vehicle systems, filtered and transient protected | 12-33 VDC, from Battery or 12 and 24 VDC vehicle systems, filtered and transient protected |
| Current@24 VDC nominal | 3 Amps nominal | 4.5 Amps nominal | 7.5 Amps nominal |
| Operating Temperature | -30 to +60 °C | -30 to +60 °C | -30 to +60 °C |
| Altitude (Operating) | 15,000 ft | 15,000 ft | 15,000 ft |
| Water | 66 ft for 20 minutes | 66 ft for 20 minutes | IP67 |
| Vibration/Shock/Humidity | Per MIL STD 810F | Per MIL STD 810F | Per MIL STD 810F |
| Size (HxWxD) Inches | 2.30 x 3.00 x 7.70 | 2.30 x 3.00 x 7.70 | 2.70 x 6.00 x 7.75 |
| Weight | 2 lb | 2 lb | 3.5 lb |
| Cooling | Natural convection required | Natural convection required | Natural convection required |
| RF Connectors | TNC Female | TNC Female | TNC, N-Type, BNC Female |
| Construction | Aluminum housing with integral heatsink | Aluminum housing with integral heatsink | Aluminum housing with integral heatsink |
| JITC Certified | No | No | In Process |
| GSA Schedule | Yes | Yes | Yes |

Cable assemblies, power cables, shock-mount kits and other accessories are available for booster amplifiers.



| | AR-75 | KMW2030/KMW2030 ABS | KMW2050 |
|------------|---|---|--|
| | 30 - 512 MHz | 30 - 512 MHz | 225-400 MHz |
| | 75 Watts CW/PEP 30-320 MHz 50 Watts CW/PEP 320-512 MHz | 125 Watts 30 - 400 MHz, ±1 dB 450 - 512 MHz, +1 dB, -2 dB | 200 Watts |
| | Yes | Yes | Yes |
| Damage | 5W typical, 20W max without damage 1 Watt | 2- 20 Watts 1 Watt | 1.5-25 Watts 1.5 Watt |
| Compatible | SINGGARS, HAVEQUICK Compatible, HPW and DAMA capable | SATCOM DAMA Compatible | SATCOM DAMA Compatible |
| | Built-in | Yes with KMW2030P | Built-in |
| | 10 dB/3 dB nominal | 12 dB/2 dB nominal | 16 dB/5.5 dB nominal |
| | -50 dB nominal | -50 | -50 dB nominal |
| | 1.5 dB typical | 1.5 dB nominal | ≤0.7 dB; Bypass mode |
| Forms | AM/FM/PM, HAVEQUICK, SINGGARS and other JTRS waveforms | AM, FM or PM | AM, FM or PM |
| | Tactical operations | Tactical operations | Tactical operations |
| | 50 Ohm nominal | 50 Ohm nominal | 50 Ohm nominal |
| | 1.5:1 nominal | 1.5:1 nominal | 1.5:1 nominal |
| | -60 dBc typical | -65 dBc typical | -60 dBc typical |
| | -75 dBc | -70 dBc | -70 dBc |
| Power | 18-36 VDC, filtered and transient protected | 19-32 VDC | 28 VDC |
| | 11 Amps nominal | 25 Amps nominal | 25 Amps nominal |
| | -30 to +60 °C | -20 to +50 °C | -20 to +50 °C |
| | 15,000 ft | 15,000 ft | 200 Watt to 6000 ft 150 Watt to 10,000 feet |
| | IP67 | Weatherproof | Weatherproof |
| | Per MIL STD 810F | Per MIL STD 810E | Per MIL STD 810E |
| | 6.5 x 4.25 x 11.70 | 7.00 x 5.00 x 13.50 | 8.25 x 4.50 x 15.50 |
| | 12.5 lb | 17 lb | 12 lb |
| | Natural convection required | Built-in fan | Built-in fan- |
| | TNC, N-Type, BNC Female | N-Type Female | N-Type Female |
| | Aluminum housing with integral heatsink | Aluminum housing with integral heatsink | Aluminum housing with integral heatsink |
| | In Process | Yes/No | Yes |
| | Yes | Yes | Yes |

AR's Infinite Solutions

We'll Customize to your Specs!

AR Modular RF is set-up to create customized variations of our products to meet your specifications. We'll work with you to create a solution that's right for your needs. And you won't have to wait for ever or spend a fortune to get exactly what you need.



Custom Modules



Custom Navy System



Custom Wafer
Cleaning Amplifier



Custom 5kW System
for MUOS Program

Accessories:

External LNA, Bias-T, Shock Mount Kits, Cables, Tactical Pouches, Antennas. Call for more!



Tactical Vest Pouch



AR-75 Remote Control



Bias-T's



Shock Mount Kit

Want to know more about AR? Need help with any RF solutions or testing procedures? Here's how to reach AR and get all the help you need:

www.ar-worldwide.com

ar Global Promise

AR Modular RF warrants each product to be free from defects in material and workmanship for a period of thirty-six (36) months from invoice date. AR Modular RF will repair the product at no charge for parts and labor should failure prove to have been caused by a factory defect as disclosed by our examination. Please see your equipment manual for the full statement of warranty conditions and limitations of liability.

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ar europe

• Offering a complete line of RF Products and testing solutions for the European Market

