

AR Modular RF For Tactical Booster Amplifier, RF Systems And Modules

Located in Bothell, WA, AR Modular RF manufactures and distributes RF amplifier modules and broadband solid state RF amplifier systems that play a critical role in wireless and radio communications, military communications, electronic warfare, electronic countermeasures, homeland security and have a variety of medical, scientific and industrial applications.

- RF amplifier modules: 0.01 to 6000 MHz, 5 to 500 watts
 - Broadband, narrowband and custom designs available
- Amplifier systems: 0.01 to 6000 MHz, 5 to 3000 watts
- Military Amplifier Systems and accessories
 - Booster amplifiers and RF Jammer amplifiers for tactical military radios from 30 to 512 MHz and from 1.2 to 1.9 GHz
- Power Amplifiers For Legacy Communication designs as well as Virtually Every New & Emerging Communications System



We Keep Passing The Toughest Tests

On the battlefield, in the air, on the ground. In the most extreme and torturous environments. Our products are constantly punished. And they consistently perform beyond expectations. AR Modular RF military products are battle-tested, airborne-certified, and gunship-approved. They're simple to operate, smaller and more portable for troops on the go. They're completely dependable.

The AR-20 is the smallest, lightest, most compact 20-watt booster amplifier in the world.

When used with your tactical radio, the AR-20 Booster Amplifier provides a clearer, stronger, more dependable signal and extends your range of communication. It provides a communications advantage that saves missions... and lives.

Even Shock & Vibration Can't Rattle The AR-50 Tactical Booster Amplifier

It survived the toughest environments... 400G shock, 4G vibration, and passed the toughest JITC Certification. The AR-50 operates perfectly every time, boosting your radio's power to 50 watts providing clear, dependable multi-communication networking. It operates from 30 to 512 MHz and works with all modern and legacy waveforms. It's compact, lightweight, easy to use. Nothing stops it.



AR Modular RF Military Products

Innovative Amplifiers That Lighten

Troops in the field need to maintain constant communications. They need to exchange information and access streaming video in real-time. But they also need to be able to move quickly and easily. It's critical that they have powerful, dependable amplifiers that are also lightweight and mobile.

That's just what they get with AR Modular RF.

Our military amplifier systems and accessories — including booster amplifiers and embeddable modules for tactical military radios covering the HF, VHF and UHF bands, and SHF Networking Bands — have been tested on the front lines in the toughest battle conditions.

They've been proven extremely durable and dependable, yet they're simple to operate.



Airborne Flight Certified AR-20H

- 20 Watts
- 30-512 MHz
- Lighter Package
- Lower Profile
- Supports Legacy plus Modern Networking Waveforms
- MIL-STD 810G (Including Gun Ship)
- MIL-STD 461F, MIL-STD 464C, MIL-STD 704F

AR-20

- 20 Watts
- 30-512 MHz
- Lighter Package
- Lower Profile
- Internal LNA
- Co-Site Filtering
- Supports Legacy plus Modern Networking Waveforms



- 20 Watts
- 30-512 MHz
- Lighter Package
- Lower Profile
- Supports Legacy plus Modern Networking Waveforms



The Load & Increase The Power.





AR-20KT-DUAL

- Dual Antenna Man-Pack Kit
- LOS and SATCOM antennas with RF switch
- Includes cables, antennas and mounting pouches
- Lightest kit on the market
- 20 Watts, 30-512 MHz
- Single Battery Operation
- Compatible with Thales PRC-148, Harris PRC-152 plus others



AR-20KT

- Man-Pack Kit
- Includes cables, antenna and mounting pouches
- Lightest kit on the market
- 20 Watts, 30-512 MHz
- Single Battery Operation
- Compatible with Thales PRC-148, Harris PRC-152 plus others

AR Modular RF Military Products

Performs In Extreme Conditions, Highest Quality. Best Warranty.

AR delivers innovative technology, advanced design, and superior workmanship with lower cost per watt, plus a worldwide support network that is here for you today, tomorrow, and always. Everything we sell is backed by the best and most comprehensive warranty in the industry.

Waveforms Supported:

 ANW2, IW, SRW, WNW, ASCM, SINCGARS, HAVEQUICK I & II, Plus Others!

Frequency Bands Supported:

HF/VHF/UHF/L-Band

Supports Multiple Radio Platforms:

 AN/PRC-154 Rifleman[™] Radio, AN/PRC-117F, AN/PRC-117G, AN/PRC-152, AN/PRC-148 (MBITR/JEM), AN/PSC-5D, AN/ARC-210, Plus Others!

AR-50SE

- 50 Watts
- 30-88 MHz
- SINCGARS Compatible
- Compatible with Thales PRC-148, Harris PRC-152, Harris PRC-117F, Harris PRC-117G plus others

NEW LOSSAT PAR SEL RE OUT RE OUT NACH SEAT ANT LOS ANT

AR-50

- 50 Watts
- 30-512 MHz
- Internal LNA
- Supports Legacy plus Modern Networking Waveforms
- DAMA and IW Certified
- 810G (Including SB-X10001B)
- Compatible with Thales PRC-148, Harris PRC-152, Harris PRC-117F, Harris PRC-117G, plus others

AR-50 "Tactical Booster Amplifier" Selected In The V-22 Osprey Upgrade.

AR-55L

- 50 Watts
- 1.2-1.9 GHz
- Internal LNA
- Includes MIL-STD 461/1275 Filter
- Supports Legacy plus Modern Networking Waveforms



SM-AR-50

- Shock Mount Kit
- Vehicle & Aircraft



AR-50-SAT75

- 30-512 MHz
- 50 Watts LOS
- 75 Watts SATCOM
- Supports Legacy plus Modern Networking Waveforms
- Compatible with Thales PRC-148, Harris PRC-152, Harris PRC-117F, Harris PRC-117G plus others



AR-75

- 75 Watts
- 30-512 MHz
- Compatible with Harris PRC-117F, Harris PRC-117G plus others
- Includes MIL-STD 461/1275 Filter
- Supports Legacy plus Modern Networking Waveforms
- Airborne Safety Flight Certified



- 50 Watts
- 30-88 MHz
- SINCGARS Compatible
- Compatible with Thales PRC-148, Harris PRC-152, Harris PRC-117F, Harris PRC-117G plus others



AR-125R

- 125 Watts
- 30-512 MHz
- Internal and External LNA
- 2U Rack Mount
- CW Duty Cycle
- Compatible with Harris PRC-117F, Harris PRC-117G plus others
- Supports Legacy plus Modern Networking Waveforms



- Fits AR-50
- Increased duty cycle
- Field upgrade



AR-RBT

- Remote Bias-T
- RF signal and DC power over single coax
- Compatible with AR-50 and AR-75

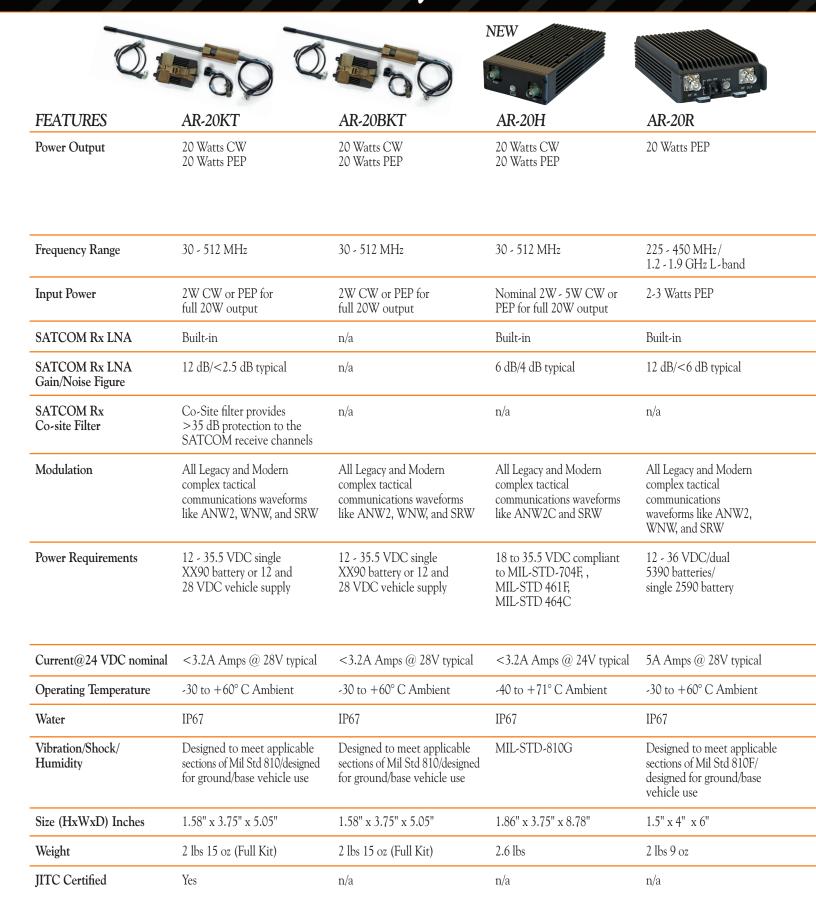
Find It Fast. Tactical Booster Amplifiers.

Tactical Booster Amplifiers

MODEL NAME	DESCRIPTION
AR-20	20 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier with LNA
AR-20KT	20 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier Kit with LNA. Kit includes amp, cables, pouches & LOS antenna.
AR-20KT-DUAL	20 Watts PEP, $30 - 512$ MHz, Tx/Rx Booster Amplifier Kit with LNA. Kit includes amp, cables, pouches, switch, LOS & SATCOM antennas.
AR-20B	20 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier
AR-20BKT	20 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier Kit. Kit includes amp, cables, pouches & LOS antenna.
AR-20BKT-DUAL	20 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier Kit. Kit includes amp, cables, pouches, switch, LOS & SATCOM antennas.
AR-20H	20 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier with Remote Keyline
AR-20EP	20 Watts CW/PEP, 225 – 450 MHz, Tx/Rx Booster Amplifier
AR-20HC2	20 Watts PEP, 300 – 512 MHz, Tx/Rx Booster Amplifier
AR-20R	20 Watts PEP, 225 – 450 MHz, 1250 – 1390 MHz and 1750 – 1850 MHz, Tx/Rx Booster Amplifier
AR-35	35 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier
AR-50	50 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifer
AR-50RC	25 Watts PEP, 30 – 512 MHz / 50 Watts PEP 290 – 320 MHz, RF Tx/Rx Booster Amplifier
AR-50RCS	50 Watts PEP, 30 – 88 MHz, Tx/Rx Booster Amplifier
AR-50S	50 Watts PEP, 30 – 88 MHz, Tx/Rx Booster Amplifier
AR-50-SAT75	50 Watts PEP, 30 – 512 MHz / 75 Watts PEP 220 – 324 MHz, Tx/Rx Booster Amplifier
AR-50SE	50 Watts PEP, 30 – 88 MHz, Tx/Rx Booster Amplifier
AR-55L	50 Watts PEP, 1.2 – 1.9 GHz, Tx/Rx Booster Amplifier
AR-75	75 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifier
AR-75HPS	100 Watts PEP 30 – 400 MHz, 75 Watts PEP, 400-512 MHz Tx/Rx Booster Amplifier
AR-75-M50	50 Watts PEP, 30 – 512 MHz, Tx/Rx Booster Amplifer
AR-125R	125 Watts PEP, 30 – 512 MHz, Tx/Rx 19" Rack Mount Booster Amplifier



Find It Fast. AR Modular RF Military Products.



GSA Schedule

Yes

No

Yes

Yes

		City Control of Control		
AR-55L	AR-50SE	AR-50	AR-50-SAT75	AR-75
50 Watts PEP	50 Watts CW nominal; 50W PEP with 80% AM modulation; <10% distortion typical	50 Watts CW nominal; 50W PEP with 70% AM modulation; <10% distortion typical	50 Watts CW nominal; 50W PEP with 70% AM modulation; <10% distortion typical 50 Watts CW, LOS, 30-512 MHz 75 Watts CW, SATCOM, 220-324 MHz	75 Watts CW nominal; 75 W PEP with 70% AM modulation; <10% distortion typical
1.2 - 1.9 GHz L-band	30 - 88 MHz	30 - 512 MHz	30 - 512 MHz	30 - 512 MHz
2-5 Watts PEP	<5 Watts CW typical for 50 Watts Output	<5 Watts CW typical for 50 Watts Output	3-8 Watts CW typical, 8W max for 50-75 Watts Output	5-8 Watts CW typical for nominal 75 Watts Output
n/a	n/a	Built-in	Built-in	Built-in
12 dB/<3.5 dB typical	n/a	12 dB/2.5 dB typical	12 dB/2 dB typical	12 dB/2 dB typical
High Pass Filter, Out of band rejection 40 dB typical	n/a	Band pass frequency 239 - 273 MHz, Out of band rejection >45dB typical	Band pass frequency 239 – 270 MHz, Out of band rejection 45 dB typical	Band pass frequency 239 – 273 MHz, Out of band rejection 45 dB typical
All Legacy and Modern complex tactical communications waveforms like ANW2, WNW, and SRW	AM, FM, or PM, and tactical communications waveforms	All Legacy and Modern complex tactical communications waveforms like ANW2, WNW, and SRW	All Legacy and Modern complex tactical communications waveforms like ANW2, WNW, and SRW	All Legacy and Modern complex tactical communications waveforms like ANW2, WNW, and SRW
28 volt Vehicle VDC filtered and transient protected for 28 volt vehicle systems or dual XX90 batteries	12-33 VDC MIL-STD-461E & 1275	12 - 36 VDC, from Battery or 12 and 24 VDC vehicle systems. Filtered and transient protected	13.8 - 36 VDC filtered and transient protected for 12 or 24 volt vehicle systems or dual XX90 batteries	18 - 36 VDC filtered and transient protected for 24 volt vehicle systems batteries MIL-STD 1275 and 461 compliant DC-DC internal power supply
7 Amps @ 28V typical	<7.5 Amps @ 24V typical	7.5 Amps nominal	<8.5 Amps @ 24V typical	<9.5 Amps @ 24V typical
-30 to +60° C Ambient	-40 to +55°C	-30 to +60° C	-30 to +60° C	-30 to +60° C
IP67	IP67	IP67	IP67	IP67
Designed to meet applicable sections of Mil Std 810F/designed for ground/base vehicle use	Per MIL STD 810F	Per MIL STD 810G (Including SB-X10001B)	Per MIL STD 810F	Per MIL STD 810F
2.5" x 6" x 7.5"	2.50" x 6.50" x 9.93"	2.50" x 6.00" x 7.50"	3.25" x 5.25" x 7.50"	3.00" x 6.00" x 11.17"
6 lbs	8.0 lbs	4.4 lbs	4 lbs 13.8 oz	10.5 lbs
n/a	Based off AR-50 design	PSC-5D, PRC-117G, PRC-148 JEM	Based off AR-50 design	Based off AR-50 design
 Yes	No	Yes	No	Yes

If You Can Imagine It, We Can Build It.

The company is also known for superior quality rack mounting and table top amplifier systems and modules from 0.01 - 6,000 MHz. With output powers from 5 - 5,000 watts, these systems and modules are used for communications and a variety of medical, scientific and industrial applications.

Perhaps most important, AR Modular RF helps clients find the best solutions to their most demanding requirements by offering customer specific designs and semi-custom modifications to our existing line of products.

All AR Modular RF products are backed by the 3 year no nonsense warranty.

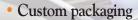
For more information, call us at 425485-9000 or visit us at www.arworld.us/modularrf.



AR-5000 Series

- Class A or Class AB
- Lightweight 19", 2U Rack Mount
- Ethernet Remote Control
- 100-500 Watts CW, 1000 Watts Peak

Subsystems for Integration





• Sub-octave and multi-octave designs



Physics Applications

- Custom frequency band
- Highly repeatable performance unit to unit
- Multiple calibrated monitoring ports
- Highly reliable for long term 24/7 use



Modules for OEM's & Integration

- 10 kHz to 6 GHz
- High and low gain power amplifier modules
- Mini-system PA modules with ALC and interfaces



Communication Systems

- VHF/UHF band operation
- Up to 1000W output
- 24/7 operation capable
- Repeatable performance unit to unit allows field interchangeability
- Single phase and 3 phase AC power capable from same unit



Standard and Custom 19 inch Rack Units

- 10 kHz to 6 GHz
- 20 to 5000 watts
- Custom engineering
- Private labeling available





Ultrasonic and Medical

- 10 kHz to 6 GHz
- 100 to 500 watts
- Remote controls
- AC and DC power supplies



Find It Fast. AR Modular RF Commercial Products.

Rack Mount Amplifiers

DESCRIPTION		
New 19" Rack Mount Product Series. 100 - 500 Watts, 80 – 1000 MHz (Call factory for details)		
25 Watts, 10 kHz – 230 MHz RF Amplifier		
500 Watts, 1 – 50 MHz, RF Amplifier, 19" Rack Mount		
25 Watts, 10 kHz – 1000 MHz, Dual Band RF Amplifier, 19" Rack Mount		
100 Watts, 220 – 245 MHz, RF Amplifier, 19" Rack Mount		
200 Watts, 200 – 500 MHz, RF Amplifier, 19" Rack Mount		
1000 Watts PEP, 500 Watts CW, 225 – 400 MHz, RF Amplifier, 19" Rack Mount		
100 Watts, 500 kHz – 100 MHz, RF Amplifier, 19" Rack Mount		
125 Watts, 700 kHz – 3 MHz, RF Amplifier, 19" Rack Mount		
200 Watts, 500 kHz – 40 MHz, RF Amplifier		
300 Watts, 500 kHz, RF Amplifier		
100 Watts, 70 – 76 MHz, RF Amplifier, 19" Rack Mount		
250 Watts, 2 – 32 MHz, RF Amplifier, 19" Rack Mount		
500 Watts, Pulse, 1 - 50 MHz, RF Amplifier, 19" Rack Mount		
300 Watts, Pulse, 1 - 50 MHz, RF Amplifier, 19" Rack Mount		
1000 Watts, Pulse, 500 kHz - 5.5 MHz, RF Amplifier, 19" Rack Mount		
5 Watts, 500 kHz – 1000 MHz RF Amplifier		
20 Watts, 1 – 512 MHz, RF Amplifier		
25 Watts, 1 – 400 MHz, RF Amplifier		
100 Watts, 200 – 500 MHz, RF Amplifier, 19" Rack Mount		
100 Watts, 100 – 500 MHz, RF Amplifier, 19" Rack Mount		
100 Watts PEP, 100 – 1000 MHz, RF Amplifier, 19" Rack Mount		
500 Watts, 390 – 410 MHz, RF Amplifier, 19" Rack Mount		
200 Watts, 800 Watts Peak, 100 – 400 MHz, RF Amplifier, 19" Rack Mount		

Amplifier Modules

Watts, 200 KHz – 50 MHz, Amplifier Module Watts, 500 kHz – 40 MHz, Amplifier Module Watts, 500 kHz – 40 MHz, Amplifier Module, (RoHS) Watts CW, 250 Watts Peak, 2 – 30 MHz, Amplifier Module - 500 Watts, 100 KHz – 50 MHz, Amplifier Module
Watts, 500 kHz – 40 MHz, Amplifier Module, (RoHS) Watts CW, 250 Watts Peak, 2 – 30 MHz, Amplifier Module - 500 Watts, 100 KHz – 50 MHz, Amplifier Module
Watts CW, 250 Watts Peak, 2 – 30 MHz, Amplifier Module - 500 Watts, 100 KHz – 50 MHz, Amplifier Module
- 500 Watts, 100 KHz – 50 MHz, Amplifier Module
W. (OW/D 1) 700 11 40 11 A 1:0 A 1 1
Watts, (CW/Pulse) 500 kHz – 40 MHz, Amplifier Module
Watts, 30 – 40 MHz, Amplifier Module
– 200 Watts CW, 500 Watts Pulse, 30 – 512 MHz, Amplifier Module
Watts, 225 – 450 MHz, Amplifier Module
- 200 Watts, 30 – 512 MHz Amplifier Module with Break Point
Watts, 291 MHz, Amplifier Module
Watts CW/125 Watts Peak, 225 – 400 MHz, Amplifier Module
Watts CW, 100 – 500 MHz, Amplifier Module
Watts, 225 – 400 MHz, Amplifier Module
att, 225 – 400 MHz, Amplifier Module
Watts, 10 kHz – 230 MHz, Amplifier Module
Watts, 500 kHz – 512 MHz, Amplifier Module
Watts, 1 – 512 MHz, Amplifier Module
Watts, 30 – 512 MHz Amplifier Module with Break Point
V V V

AR's Competitive Edge

At AR, there's no substitute for quality. It's the foundation of our business and the AR value that's recognized around the globe. It's one of the key reasons AR has become the worldwide leader in EMC, Wireless and beyond.

AR products do more, last longer, work harder and make your job easier. And that gives you a fierce competitive edge. Only AR delivers innovative technology, advanced design, quality build & workmanship, mismatch capability, durability & longevity, less cost watt for watt, and a worldwide support network that's here for you today and tomorrow. With the combined resources of all the AR companies, we simply have more of the best people making the best products to overcome your toughest challenges.

91 Modular RF

- RF Amplifiers and Modules
- Broadband and Sub-band Solid State RF Amplifiers
- Booster Amplifiers for Tactical Military Radios

91 RF/Microwave Instrumentation

- RF Solid State Amplifiers 1 to 50,000 watts, dc to 1 GHz
- Microwave Amplifiers 1 to 10,000 watts, 0.8 to 50 GHz
- Antennas Up to 15,000 watts input power, 10 kHz to 50 GHz
- RF Conducted Immunity Test Systems
- EMC/RF Test Systems
- Hybrid Power Modules
- Power Measuring Equipment
- Accessories and Software
- Electromagnetic Safety Products

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AR RF/Microwave Instrumentation

Sunge RF Motion

- Positioning equipment, turntables and towers
- Distributed antenna systems
- Reverberation chamber stirrers

Of Receiver Systems

A line of products & services for EMC Testing including:

- EMI Receivers
- Leak Detectors

91 Europe

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

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.arworld.us/modularrf

For RF Amplifier modules, contact:

9f Modular RF

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For your local AR Modular RF sales representative, please visit: www.arworld.us/modularrfsales

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Sunge RF Motion

6780 Sierra Court, Suite R Dublin, CA 94568 Tel 925-833-9936 • Fax 925-833-9059

For receiver systems, contact:

of Receiver Systems

Tel 800-933-8181

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AR Modular RF is ISO Certified.

ISO 9001:2015 Certified

