

AR-20 SERIES RF BOOSTER AMPLIFIERS



FEATURES & BENEFITS:

- 20 Watts
- 30 - 512 MHz
- Fully automatic T/R switching
- Harmonic filtering
- Lightweight package
- Low-profile design
- Optional internal LNA
- Rugged and reliable operation
- Man-portable battery operation
- Waveforms supported: AM, FM, ANW2, IW, DAMA, SRW, HPW, SINCGARS, HAVEQUICK I and II, and more
- Supports Multiple Radio Platforms: AN/PRC-117G, AN/PRC-152, AN/PRC-148 (MBITR/JEM), AN/PRC-163, AN/PRC-167, AN/PRC-154 Rifleman™ Radio, AN/PSC-5D, AN/ARC-210, and more

The AR-20 series booster amplifiers enhance communication distance and reliability. Offering 20 Watts of output power over the 30 to 512 MHz range, these amps work with a wide range of tactical military communication radios and systems.

The fully automatic T/R switching booster amps support legacy and proprietary waveforms and operate from a wide range input DC voltage allowing use from a single battery (XX90) or 12 and 28 VDC vehicle power sources.

Our battle tested amplifiers include over temperature protection, RF sensing, T/R Switching, automatic level control (ALC), harmonic filters, and protection against antenna mismatch. Models within the AR-20 series also have built-in internal LNA with co-site filtering that can be switched on or off by the front panel switch to improve SATCOM receive performance.

Optional coax cables, DC battery cables, mounting plates, and kits for man-packing the amplifiers are available.



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Features

	AR-20	AR-20KT	AR-20B	AR-20BKT	AR-20H	AR-20HC2
						
Power Output	20 Watts CW 20 Watts PEP	20 Watts CW 20 Watts PEP	20 Watts CW 20 Watts PEP			
Frequency Range	30 MHz-512 MHz	30 MHz-512 MHz	30 MHz-512 MHz	30 MHz-512 MHz	30 MHz-512 MHz	300 MHz-500 MHz
Input Power	2W CW or PEP for full 20W Output	2W CW or PEP for full 20W Output	2W CW or PEP for full 20W Output	2W CW or PEP for full 20W Output	Nominal 2W-5W CW or PEP for full 20W Output	Nominal 0.75W-3W CW or PEP for full 20W Output
SATCOM Rx LNA	Built-in	Built-in	N/A	N/A	Built-in	Built-in
SATCOM RX LNA Gain/Noise Figure	12 dB/<2.5 dB typical	12 dB/<2.5 dB typical	N/A	N/A	6 dB / 4 dB typical	10 dB / 2.5 dB typical
SATCom RX Co-site Filter	Co-site filter provides >35 dB protection to the SATCOM receive channels	Co-site filter provides >35 dB protection to the SATCOM receive channels	N/A	N/A	N/A	N/A
Modulation	All legacy and modern complex tactical communications waveforms like ANW2, IW and SRW	All legacy and modern complex tactical communications waveforms like ANW2, IW and SRW	All legacy and modern complex tactical communications waveforms like ANW2, IW and SRW	All legacy and modern complex tactical communications waveforms like ANW2, IW and SRW	All legacy and modern complex tactical communications waveforms like ANW2, IW and SRW	All legacy and modern complex tactical communications waveforms like FSK, ANW2, IW and SRW
Power Requirements	12-35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply	12-35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply	12-35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply	12-35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply	18-35.5 VDC compliant to MIL-STD 704F, MIL-STD 461F, MIL-STD 464C	9.5 to 36 VDC
Current @ 24 VDC nominal	<3.2A @ 28 V typical	<3.2A @ 24 V typical	<3.5A @ 24 V typical			
Operating Temperature	-30 to 60° C ambient	-40 to 71° C ambient	-40 to 70° C ambient			
Water	IP67	IP67	IP67	IP67	IP67	IP67
Vibration/Shock/Humidity	Designed to meet applicable sections of MIL-STD-810 / designed for ground / base vehicle use	Designed to meet applicable sections of MIL-STD-810 / designed for ground / base vehicle use	Designed to meet applicable sections of MIL-STD-810 / designed for ground / base vehicle use	Designed to meet applicable sections of MIL-STD-810 / designed for ground / base vehicle use	MIL-STD-810G	MIL-STD-810
Size (HxWxD) Inches	1.58 x 3.75 x 5.05	1.86 x 3.75 x 8.78	1.86 x 3.75 x 8.87			
Weight	1 lb. 10 oz	2 lb. 15 oz (full kit)	1 lb. 10 oz	2 lb. 15 oz (full kit)	2.6 lb.	2.6 lb.
JITC Certified	Yes	Yes	No	No	No	No
GSA Schedule	Yes	Yes	Yes	Yes	Yes	Yes