

AR-FS-20 SERIES FAST SWITCHING AMPLIFIERS



FEATURES & BENEFITS:

- 20 Watts
- Fast T/R switching - under 2 μ s
- Fully automatic, Auto-sensing, T/R switching booster amplifier with automatic harmonic filtering
- Radio & waveform agnostic
- Mobile form factor
- NVG compatible interface
- Optional DC power cables available
- Waveforms supported: TSM, WREN, AM, FM, ANW2, IW, DAMA, SRW, HPW, SINCGARS, HAVEQUICK I and II, Frequency Hopping, CDMA/WCDMA, OFDM 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

Enhanced battlefield data links using the AR-FS-20 series of booster amps provide greater distance and reliability for today's tactical networks. This new series of amps offer 20 Watts output power with switching speeds under 2 μ s to improve network performance.

These fully automatic T/R switching booster amps support the latest MANET waveforms as well as legacy and proprietary waveforms. Operating from a wide range input DC voltages, the AR-FS-20 can be deployed in many applications including vehicles, dropkits, and aircraft.

Our battle tested amplifiers include over temperature protection, RF sensing, T/R Switching, automatic level control (ALC), harmonic filters, and protection against antenna mismatch.

Extending the range and quality of tactical radios has never been easier - or faster! The AR-FS-20 series is designed for easy operation with minimum operator intervention for rapid deployment.



AR-FS-20 SERIES FAST SWITCHING AMPLIFIERS

Features

AR-FS-20LS



AR-FS-20U



AR-FS2-20LS
Available Q3 2025
(Specs Preliminary)



AR-FS2-20VU
Available Q4 2025
(Specs Preliminary)



Power Output	20 Watts total channel power			
Frequency Range	1250 MHz-2600 MHz	225 MHz-450 MHz	1250 MHz-2600 MHz	30 MHz-512 MHz
Input Power	2W CW / PEP			
T/R Switching Speed	Under 2 μ s	Under 2 μ s	Under 2 μ s	Under 2 μ s (225-512 MHz) Under 5 μ s (30-225 MHz)
Receive LNA Gain	10 dB+	N/A	10 dB+	10 dB+
Insertion Loss	2.0 dB (LNA Off)	1.5 dB	1.5 dB (LNA Off)	1.5 dB (LNA Off)
Bypass Tx Insertion Loss	1.5-2.0 dB	1 dB	1 dB	1 dB
Harmonic Performance	Better than -60 dBc			
DC Input Voltage	18 to 36 VDC	18 to 36 VDC	12 to 36 VDC	12 to 36 VDC
Power Consumption (Tx)	140 W	72 W	100-120 W	100-120 W
Operating Temperature	-30 to +60°C	-30 to +60°C	-30 to +60°C	-30 to +60°C
Duty Cycle at Ambient, no Force Air Cooling	90%	90%	TBD	TBD
Standards	MIL-STD-810, MIL-STD-461, MIL-STD-1399	MIL-STD-810, MIL-STD-461, MIL-STD-1399	MIL-STD-810, MIL-STD-461, MIL-STD-1399	MIL-STD-810, MIL-STD-461, MIL-STD-1399
Immersion	IP67	IP67	IP67	IP67
Size (H x W x D)	5.0 x 3.0 x 7.4	5.0 x 3.0 x 6.9	1.86 x 3.75 x 8.78	1.86 x 3.75 x 8.78
Weight	4.5 lbs.	4.5 lbs.	~2.6 lbs.	~2.6 lbs.