

20-Watt 30-512 MHz Amplifier

A-320



Features

- **Combat proven**
- **Supports DAMA & JTRS waveforms**
- **Full-rated power across the 30-512 MHz range**
- **Radio manufacturer independent**
- **JITC certified for HAVEQUICK & SINCGARS**
- **HERO, HERP, & HERF tested and approved**
- **MIL-STD 810F and 461E certified**
- **Sealed and weather-resistant**
- **Remote power ON capability**
- **Three year warranty**

NSN# 5996015602777

Overview

We designed this amp specifically to meet the needs of the warfighter. At 24 ounces, the A-320 amplifier is the smallest and lightest on the market. Combat proven, it is unlike anything presently available in terms of 20-watt power, performance and backed by AMTI's quality assurance and 36-month warranty.

Why pay for part-time power? When you power up this amp, be confident that you will get reliable 20-watt ALC controlled amplification across the 30-512 MHz frequency range.

The A-320 is designed for seamless transition to DAMA technology, making it a solution not only for today but for tomorrow.

Applications

As a lightweight portable solution, the A-320 is ideal for the soldier on the move. It can also integrate easily as a value-added amplifier for radio manufacturers' and system integrators' packaged offerings. It is compatible with most field radios used by the military, government agencies and homeland security. This includes, but is by no means limited to the Thales

AN/PRC-148 MBITR, Harris AN/PRC-152, Harris RF5800 and most radios operating in the 30-512 MHz range. The A-320 is also available in two AMTI-packaged solutions, the A-320KT Total Solution Kit (amp plus accessories) and the LPAS-320 Lightweight Portable Amplification System.

Single Battery Operation

No longer does single battery operation mean less power. Unlike other amps that require two batteries for 20-watt operation, the A-320 averages full-rated power for up to 15 hours on a single 5590 battery. Use a single 5390 battery and you can extend the operational life to 24 hours. Times are based on a 15% transmit duty cycle.

Operational Readiness

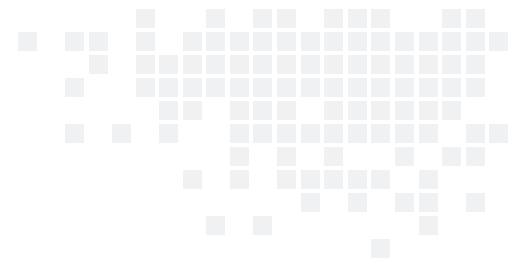
You can be confident that your communications system is ready when you are. The A-320 monitors antenna performance, BIT and battery status. With ALC controlled amplification across the entire 30-512 MHz frequency band, the A-320 provides consistent and reliable performance.

True SINCGARS & HAVEQUICK Compatibility

Some amps use wide-band harmonic filters or bypass harmonic filtering to become SINCGARS and HAVEQUICK capable. The result is that they can inadvertently jam other friendly nets in the area. Not so with AMTI's exceptional harmonic filtering and auto-sensing technology. You get true compatibility.

20-Watt 30-512 MHz Amplifier

A-320



A-320 Technical Specifications

Part No.	A-320V1
Size (H x W x D - inches)	1.5 x 3.75 x 5.5
Weight (with cage assembly)	24 oz.
Frequency Range	30-512 MHz full-spectrum
Input/Output Impedance	50 ohm
RF Input	5 watts (nominal)
RF Output (FM)	20 watts
RF Output (AM)	20 watts PEP/110-512 MHz
RX Path Insertion Loss	< 1.5 dB
RX Path VSWR	< 2:1
Bypass Path Insertion Loss	< 1 dB
Power	18-36 VDC
Power @ Transmit	~65 watts
Power @ Receive	< 3.0 watts
SINGGARS/HAVEQUICK	compatible
RF Connector RAD/ANT	BNC/TNC female
Operating Temperature	-40° to +60° C
Weather Resistant	MIL-STD 810F submersible 1M for 30 mins.
EMI	MIL-STD 461E
Finish	Black, anodized
Indicators:	
Power ON/OFF	•
Power Set	7, 10, 15, 20 watts
TX Active	•
RX Active	•
VSWR Fault	•
Over Current	•
System 1	•
System 2	•
Battery	•
Over Temperature	•



New A-320DPA Dual Port Adapter with LNA functionality fits all A-320 amplifiers.

