

A-320V1-H

20-Watt 350-450 MHz Amplifier

Technical Datasheet

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Overview

We designed this amp specifically to meet the needs of the warfighter. At 24 ounces, the A-320V1-H amplifier is small and lightweight. Combat proven, it is unlike anything presently available in terms of 20-watt power, performance and is backed by Ultralife'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 350-450 MHz frequency range.

Application

As a lightweight portable solution, the A-320V1-H 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 Harris RF-7800S Secure Personal Radio and most radios operating in the 350-450 MHz range.

Features

- Combat proven
- Full-rated power across the 350-450 MHz range
- Radio manufacturer independent
- MIL-STD 810F and 461E certified
- Sealed and weather-resistant
- Remote power ON capability
- Three year warranty

Technical Specifications	
Part No.	A-320V1-H
Size H x W x D (inches)	1.5 x 3.75 x 5.5
Weight	24 oz.
Frequency Range	350-450 MHz
Input/Output Impedance	50 ohm
RF Input	2-5 watts
RF Output (FM)	18-20 watts
RX Path Insertion Loss	< 1.5 dB
RX Path VSWR	< 2:1
Bypass Path Insertion Loss	< 1 dB
Power	18-34 VDC
Power @ Transmit	~65 watts
Power @ Receive	< 3.0 watts
Frequency Hopping	Capable
RF Connector RAD/ANT	TNC/BNC
Operating Temperature	-30°C 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	•

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-320V1-H 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-320V1-H monitors antenna performance, BIT and battery status. With ALC controlled amplification across the entire 350-450 MHz frequency band, our amp provides consistent and reliable performance.

A-320V1-H
Virginia Beach, Virginia

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