

A-305 & A-350

50-Watt Multiband Amplifiers

Technical Datasheet

ULTRALIFE®

WE. ARE. CRITICAL. POWER.™



Overview

We designed the A-305 & A-350 to be the most consistent, high-performance, fixed base or vehicle mounted 50-watt amplifiers available in the 30-512 MHz frequency range. Radio manufacturer independent means that the A-305 works with the Thales AN/PRC-148 MBITR as well as all variants of AN/PRC-152 and other radios operating in the 30-512 MHz range. Anything that lightens the load when you are on the move is advantageous. With shock tray included, both units weigh less than 10 pounds.

Like all our amps, these are true HAVEQUICK and SINCGARS compatible as opposed to many other amps that are merely capable. Another important distinction is AMTI's exceptional harmonic filtering and auto-sensing frequency hopping technology. As a result, the A-305 and A-350 do not inadvertently jam or desensitize other communication nets operating in the same area.

Features

- Combat proven
- Radio-agnostic
- SATCOM compatible
- True HAVEQUICK & SINCGARS compatibility
- MIL-STD 810F & 461E compliant
- Compatible with AN/PRC-148, MBITR, and all variants of AN/PRC-152 radios
- Weighs less than 10 lbs.
- Sealed, watertight & weather resistant
- Includes easy-to-install shock and vibration mounting tray
- Fault/Status monitoring
- Accepts standard MBITR cables
- Three year warranty

Technical Specifications	
Part No.	A-305 & A-350
A-305 Size H x W x D (inches)	10.12 x 6.75 x 4.5
A-350 Size H x W x D (inches)	10.12 x 6.75 x 2.78
Weight (with cage assembly)	<10 lbs.
Frequency Range	30-512 MHz
Radio Charging Pocket	A-305 only (12.6 V Lithium-ion battery)
RF Input	3-8 watts (5 watts nominal)
RF Output (FM)	50 watts
RF Output (AM)	50 watts PEP 110-512 MHz
RX Path Insertion Loss	< 1.5 dB
RX Path VSWR	< 2:1
Bypass Path Insertion Loss	< 1.5 dB
AM Distortion	< 15% 110-512 MHz
MTBF	15,000 hours
DC Power	10-36 VDC
DC Input Power - Transmit	420 watts (max.)
DC Input Power - Receive	20 watts
RF Connector RAD/ANT	TNC/BNC (female)
Operating Temperature	-40°C to +60°C
Duty Cycle	33% @ 60°C = 50 watts
Weather-Resistant	Yes
Finish	Black, Anodized

More than Quality Control

All our amplifiers come with a three year warranty. Each unit is put through vigorous testing and analysis prior to shipment. When you power up this amp, be confident that you get the performance you expect ... not part of the time, all of the time.

Difference Between Parts

The only difference between the A-305 and the A-350 is that A-305 includes a charging pocket for the MBITR radio.



A-305 & A-350
Virginia Beach, Virginia

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Indicators

Power ON/OFF	•
Power Level Switch	•
Transmit Active	•
VSWR Fault	•
Over Current Fault	•
RF Input Overload	•
Low RF Output	•
Over Temperature	•

Graph

Ultralife gained this product through its acquisition of AMTI.
With AMTI's exceptional harmonic filtering and auto-sensing technology,
you will not inadvertently jam other friendly nets.

