

## A-2303 30-512 MHz Amplifier



### Overview

The A-2303 is the latest amplifier in Ultralife's long and successful history of RF amplifier development.

The A-2303 amplifier continues the RF sensing technology we were first to develop over 20 years ago. All necessary radio interfacing is accomplished via a single RF cable. From here the amplifier then automatically performs all necessary detection and classification to provide a faithful reproduction of the radio RF with the desired amplification. The A-2303 is compatible with legacy waveforms as well as many modern proprietary and military waveforms.

Optimized for use with low power PRR radios, delivering 20 watts with ~.75 watt of RF drive power.

Remote On/Off control.

Power for the optional active cooling module is provided on the bottom of the amplifier for seamless integration.

### Features

- ▶ **Frequency Range 30-512 MHz**
- ▶ **RF output power: 7-20 Watts**
- ▶ **Efficient design drawing ~2.25 amps**
- ▶ **Excellent thermal performance!**
- ▶ **Switchable Receive LNA ~12dB gain**
  - **<3dB Noise Figure**
- ▶ **10-36 VDC operation for commercial or military vehicle and battery power sources.**
- ▶ **Mil-Std harmonic performance**
- ▶ **Mil-STD 1275 compliant**
- ▶ **Smallest, lightest RF amplifier available.**



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## A-2303 Technical Specifications

Part No.	A-2303
Size (H x W x D - inches)	1.5 x 3.1 x 5.15in (3.8 x 7.87 x 13.08cm) includes connectors
Weight	19oz. (540g)
Frequency Range	30-512MHz
Input/Output Impedance	50ohm
RF Input	.75 to 5 watts (nominal)
RF Output - FM	20 watts
RF Output - AM	20 watts PEP/116-512 MHz
RX Path Insertion Loss / LNA gain	< 2.0dB (~12dB with LNA "ON")
RX Path VSWR	< 2:1
Bypass Path Insertion Loss	< 0.75dB
Power	10-36Vdc operation
Power @ Transmit	~65 watts
Power @ Receive	< 10 watts
RF Connectors	TNC female
Operating Temperature	-40° to +60° C
Environmental	MIL-STD 810F
EMI	MIL-STD 461
Finish	Tan CERAKOTE <sup>®</sup>



► **Accessories:** See A-2303KT data sheet for details

- Active Cooling Assembly
- Molle Mount
- Vehicle Mount
- Power Cable
  - xx90 (included)
  - Land Warrior
  - Blunt cut
- Dual Port Adapter (in development)
  - 30-88 & 116-512 MHz



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