



ARA-252-201

The ARA-252-201 antenna is a dual-port, multiband, omnidirectional, vehicular mounted antenna. The antenna consists of three collocated apertures to provide maximum performance and minimal footprint once installed. The two upper bands are diplexed together while the low band is provided on a separate channel. The antenna high-band port has been designed for optimum gain from 225 to 450 MHz, 1350 to 2600 MHz and is perfect for UHF and WNW Software Defined Radio (SDR) applications. The low-band port adds 30 to 88 MHz operation intended for SINCGARS communications. The gain has been tuned for -10° to +10° in elevation while providing full 360° in azimuth with less than 1.5 dB or variance. The antenna is rated for 125 Watts of CW power over both bands.

This antenna is intended to be bolted to a standard Universal Antenna Mount or a NATO standard 4.5-inch bolt circle found on most military vehicles. The two N-Female connectors are located at the base of the antenna in the center of the mount. This antenna is an environmentally qualified, Commercial Off the Shelf (COTS), TRL 9 basic antenna and TRL 7 in its present form. The rugged construction is designed to pass the operational “Oak Beam” test at 25 mph.



**ARA-252-201
Communications Antenna**

Gain	Port 1: -7 to 0 dBi nominal Port 2: 1 to 4.5 dBi
	Port 1: 30 to 88 MHz Port 2: 225 to 450 MHz, 900 to 2600 MHz
Impedance	50 Ω
	Port 1: 3.0:1 max, 2.5:1 average Port 2: 2.5:1 nominal
Power Handling	125 W CW
	Two type N-Female
Mount	Spring on NATO mount
	8.36 lb (3.8 kg)
Dimensions	60" H x 1.75" Dia (1.52 m x 4.4 cm)

FEATURES

- Extremely broadband performance
- Low observability signature compared to performance
- Excellent gain across all bandwidth
- Single mounting point solution for wideband radios
- Made in the USA

Revised May 5, 2022



8880 Gorman Road, Laurel, MD 20723 | 301-937-8888 | ara-inc.com

The data described herein may be subject to licensing under the International Traffic Arms Regulations (ITAR) 22 CFR Parts 120-130. This data sheet has been released into the public domain in accordance with these regulations. Specifications are subject to change without notice.