



# ARA-1220

Communications Antenna

## Creating Tomorrow's Antenna Technology Today

The **ARA-1220** antenna is a wide band, omni-directional, vehicular communications antenna. The antenna has been tuned for performance between 1200 MHz and 2000 MHz. The gain has been tuned for -10° to 10° in elevation with azimuthal variations ±1 dB. Broadband, low SWR ensures no power reduction in mobile or vehicular amplifiers. The lightweight, low-profile construction makes the antenna easy to carry on a mobile device.

This antenna is designed to be fully qualified at an environmental laboratory. The rugged, TRL-6 (Technology Readiness Level) antenna can be coated with a variety of materials including CARC Green/Tan or Dead Flat Black paint.

### Electrical Specifications

Frequency (MHz): ..... 1200 - 2000  
VSWR: ..... < 1.75:1 typical  
VSWR (*max*): ..... 2.25:1  
Gain..... 3 – 5.5 dBi  
Power (*vehicular*): ..... 100+ Watts CW  
Input Impedance: ..... 50 Ω  
Port: ..... J1  
Connector: ..... Type N Female

### Mechanical Specification

Weight (*vehicular*) ..... 3.5 lbs (1.6 kg)  
Height ..... 24 in (0.61 m)  
Diameter ..... 1.5 in (38 mm)  
Mount (*vehicular*) ..... NATO 4-hole  
Finish..... CARC Green (Tan), Black  
Spring..... >40,000 flexures at 60°  
Spring..... 4,000 flexures at 90°



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The ARA-1220 is a ground-plane independent antenna with an aluminum mount for excellent electrical bonding to a standard vehicular NATO mount or manpack radio. The radome offers isolation of greater than 25 kV.