

Creating Tomorrow's Antenna Technology Today

The **ARA-252** antenna is a single port, multi-band, omni-directional, vehicular-mounted antenna. The antenna has been designed for optimum gain from 225 to 450 MHz, 1350 to 1850 MHz and is perfect for UHF and WNW Software Defined Radio applications. The gain has been tuned for  $-10^{\circ}$  to  $10^{\circ}$  in elevation and azimuthal variations are  $\pm 1.5$  dB. The antenna has been rated for 100 Watts CW over the entire band and does not require any tuning or ground plane for operation.

This antenna bolts to a standard Universal Antenna Mount or a NATO standard 4.5-inch bolt circle found on most military vehicles. The Type N Female connector is located in the base of the antenna in the center of the mount. This antenna is an environmentally qualified, Commercial Off the Shelf (COTS), TRL-6 (Technology Readiness Level) antenna. The rugged design has also passed the Oak Beam Test; this rigorous test involves 25 oak beam strikes to the mid point of the antenna at 25 miles per hour.

### Electrical Specifications

Frequency (MHz): ..... 225 - 2000  
 VSWR: ..... < 2.5:1 typical  
 VSWR (*max*): ..... 3.5:1  
 Gain ..... > 0 dBi  
 Power: ..... 100+ Watts CW  
 Input Impedance: ..... 50  $\Omega$   
 Port: ..... J1  
 Connector: ..... Type N Female

### Mechanical Specification

Weight ..... <10 lbs (4.5 kg)  
 Height ..... 43 in (1092 mm)  
 Diameter ..... 1.75 in (44.5 mm)  
 Diameter (base) ..... 5.5 in (89 mm)  
 Mount ..... NATO 4-hole  
 Finish ..... CARC Type III Green (Tan)  
 Spring ..... >40,000 flexures at  $60^{\circ}$   
 Spring ..... 5,000 flexures at  $90^{\circ}$



**ARA-252**

Contact us today to find out more about this antenna and the completed qualification programs today!