

communications solutions

ARA-1220 Series

The ARA-1220 and ARA-1220-101 are designed for use in the most demanding and harsh tactical conditions. The lightweight, low-profile construction combined with a standard NATO 4-Bolt mounting pattern allows easy integration into military vehicles and most antenna mast systems. The ARA-1220 is tuned for performance between 1200 MHz and 2000 MHz but performs well up to 2500 MHz. The ARA-1220-101 antenna includes a bandpass filter and a built-in low noise preamplifier. DC power is applied and decoupled from the single RF connector at the base. The bandpass filter on the ARA-1220-101 reduces the band to operate between 941.5 MHz and 1126.5 MHz. The maximum gain is tuned for -10° to $+10^{\circ}$ in elevation with azimuthal variations of 31 dB. Broadband, low VSWR ensures no effective radiated power reduction in mobile or vehicular platforms.

Antenna Type	Omni
Application	Military Communications
Frequency Band	L (1 - 2 GHz)
Polarization	Vertical

	ARA-1220	ARA-1220-101
Gain	3.0 to 5.5 dBi	9.0 to 15.0 dBi
Frequency	1200 to 2000 MHz	941.5 to 1126.5 MHz
Noise Figure	N/A	1 dB typical
DC Input	N/A	12 to 15 V
Power Handling	100+ Watt CW	19 mW (+13 dBm)
Polarization	Vertical	Vertical
Impedance	50 Ω	50 Ω
VSWR	< 1.75:1 typical; 2.25:1 max	2.5:1 max
Port	J1	J1
Antenna Connector	Type-N Female	Type-N Female
Weight	3.5 lb (1.6 kg)	4.2 lb (2 kg)
Height	24 in (0.61 m)	27.8 in (0.7 m)
Diameter	1.5 in (38 mm)	1.5 in (38 mm)
Spring	>40,000 flexures at 60° ; 4,000 flexures at 90°	>40,000 flexures at 60° ; 4,000 flexures at 90°



ARA-1220

FEATURES

- Lightweight
- Extremely rugged
- Low-profile construction
- NATO 4-hole vehicular mount
- Option for bandpass filter and low-noise preamplifier
- Available in green, tan, or black CARC finish. Custom colors available on request.
- Made in the USA

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