RDF PRODUCTS *Vancouver, Washington, USA +1-360-253-2181*

Product Data Sheet; Model DMA-1915R1 1,575.42 MHz GPS

Narrow-Band Mobile Adcock Radio Direction Finding Antenna

FEATURES

- **Designed Expressly for GPS Interference Tracking**
- **True Adcock Design - Not Inferior Pseudo-Doppler**
- **Optimized for 1,575.42 MHz GPS Frequency**
- **3.5° RMS Typical Bearing Accuracy**
- **High Signal Handling Capability**
- **Vehicle Roof-Top or Aircraft Installation**
- **Low-Profile Platform**

DESCRIPTION

The RDF Products Model DMA-1915R1 is a 5-aerial UHF monopole Adcock single-channel radio direction finding antenna. It is expressly designed and optimized for interference tracking and location DF missions at the 1,575.42 MHz primary GPS frequency. This rugged, compact, light-weight, weather-sealed unit is specifically designed for mobile operation and is easily installed on cars, vans, aircraft, or any platform having a sizeable metallic ground plane.

Traditionally, Adcock DF antennas have been very difficult to design and manufacture at frequencies over 1,000 MHz. Existing models built for this frequency range tend to exhibit poor performance and are very expensive. With the introduction of the DMA-1915R1; however, RDF Products has employed proprietary technology to develop a cost-effective narrow-band high-UHF Adcock DF antenna with performance approaching that attainable in its under-1,000 MHz UHF models.

Being of a true Adcock design, the DMA-1915R1 provides sensitivity superior to that of comparable pseudo-Doppler DF antennas. The DMA-1915R1 has also been designed with high signal-handling capability for reliable performance in dense signal environments.

The DMA-1915R1 directly interfaces with all RDF Products DF bearing processors via two captive 15' interface cables (the DMA-1915R1/D employs detachable cables).

SPECIFICATIONS

DF Technique:	Single-channel 2-phase Adcock (central sense)
Frequency Coverage:	1550-1600 MHz
Bearing Accuracy:	4.5 degrees RMS max.; 3.5 degrees RMS typical (ideal siting conditions)
Polarization:	Vertical
Output Impedance:	50 ohms nominal
2nd Order Intercept:	+28 dBm typical (referenced to central sense input)
3rd Order Intercept:	+13 dBm typical (referenced to central sense input)
Power Requirements:	11-16 VDC @ 180 mA (negative ground)
Operating Temperature:	-40 to +60 degrees C
Storage Temperature:	-40 to +70 degrees C
Humidity:	0-100%
Dimensions:	4.6"x8.5"x8.5" (HxWxD; excludes cables and 1.05" strap-bracket horizontal protrusions on mounting plate)
Weight:	4.0 lbs.

Note: Specifications are subject to change without notice.

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APPLICATIONS INFORMATION

The RDF Products Model DMA-1915R0 has been designed specifically for narrow-band coverage at or near the 1,575.42 MHz primary GPS frequency for the express purpose of mobile DF tracking and location of GPS interference. Similar narrow-band models can also be supplied for coverage in other portions of the 1,000-2,000 MHz range.

The DMA-1915R1 can be mounted on a variety of platforms. For car-top installations, the captive strap brackets allow the unit to be secured using the supplied nylon mounting straps and rain-gutter hooks. A rubber pad on the underside protects painted vehicle roof-tops. For aircraft or other platforms where the unit is to be permanently mounted, the 1/4" mounting holes along the baseplate flange provide a convenient and reliable means by which the unit can be securely bolted to a metal surface. Custom mounting configurations are also available where the cables must be brought directly through the bottom plate rather than out the side.