

RDF PRODUCTS

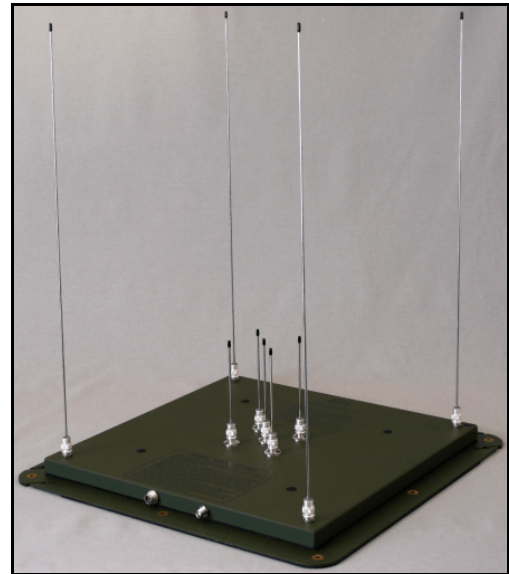
Vancouver, Washington, USA +1-360-253-2181



Product Data Sheet; Model DMA-1265B1 Ultra-Wide Coverage VHF/UHF Mobile Adcock Radio Direction Finding Antenna (Preliminary)

FEATURES

- C 20-1,000 MHz Ultra-Wide Coverage in Four Bands
- C True Adcock Design - Does Not Use Inferior Loops
- C Wide Aerial Spacing for Enhanced Low-VHF Performance
- C No Requirement to Change Aerial Sets
- C High Signal Handling Capability
- C Vehicle Roof-Top Installation
- C Low-Profile Platform with Removable Aerials
- C Built-In RS-232 Personality Module



DESCRIPTION

The RDF Products Model DMA-1265B1 is a dual 4-aerial VHF/UHF monopole Adcock single-channel radio direction finding antenna covering 20-1,000 MHz in four bands (20-88/88-200/200-470/470-1,000 MHz). This rugged, compact, light-weight, weather-sealed unit is specifically designed for mobile DF applications and is easily installed on cars, vans, utility vehicles, or any platform having a sizeable metallic ground plane. The aerials do not need to be changed to cover the full specified frequency range, and are easily removed for convenience of shipping and storage.

Being of a true Adcock design, the DMA-1265B1 avoids the erratic performance associated with inferior loop DF antennas and provides sensitivity and listen-thru capability superior to that of comparable pseudo-Doppler units. The DMA-1265B1 has also been designed with exceptional signal-handling capability for reliable performance in dense signal environments. The unit is particularly attractive in that it offers ultra-wide frequency coverage in a modestly-sized package.

The DMA-1265B1 directly interfaces with all RDF Products DF receivers and bearing processors via a 4.5-meter interface cable. With its built-in personality module, the unit automatically conveys model and band information via RS-232 to RDF Products "B"-series DF processors.

SPECIFICATIONS

| | |
|------------------------|---|
| DF Technique: | Single-channel 2-phase Adcock (mixed sense) |
| Frequency Coverage: | 20-88/88-200/200-470/470-1,000 MHz |
| Bearing Accuracy: | 3° RMS (VHF) 5° RMS (UHF) (ideal siting conditions) |
| Polarization: | Vertical |
| Output Impedance: | 50 ohms nominal |
| 2nd Order Intercept: | +25 dBm (20-88 MHz) +40 dBm (88-200 MHz) +36 dBm (200-470 MHz) +25 dBm (470-1,000 MHz) |
| 3rd Order Intercept: | +15 dBm (20-88 MHz) +25 dBm (88-200 MHz) +25 dBm (200-470 MHz) +12 dBm (470-1,000 MHz) |
| Power Requirements: | 11-16 VDC @380 mA |
| Operating Temperature: | -40 to +60 degrees C |
| Storage Temperature: | -40 to +70 degrees C |
| Humidity: | 0-100% |
| Dimensions: | 26.50"x22.0"x22.0" (HxWxD; with baseplate less cables) |
| Weight: | 15 lbs. |

Note: Specifications are subject to change without notice.

Rev B01/09-06/dma1265b1_pds_01

APPLICATIONS INFORMATION

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The RDF Products Model DMA-1265B1 has been designed as a general-purpose VHF/UHF mobile DF antenna covering an ultra-wide frequency range in a compact, light-weight package. One of the outstanding features of this unit is its ability to cover its full 20-1,000 MHz range without the inconvenient requirement for removing unused aerial sets. More specifically, it is not necessary to remove the VHF (outer) aerial set for UHF operation (a common requirement for dual 4-aerial Adcock designs).

For vehicle roof-top installations, nylon mounting straps and rain-gutter hooks are supplied for fast and convenient temporary mounting to cars, vans, mini-vans, and utility vehicles. These mounting straps loop into the slots milled into the 1/8" thick bottom-plate for this purpose.

A rubber protective mounting pad is adhesively attached to the bottom-plate to protect painted vehicle roof-tops. The unit can also be bulkhead mounted using the 8 quarter-inch holes drilled into the bottom-plate flange.

For the convenience of users contemplating bulkhead mounting, the protective adhesive-backed mounting pad can be supplied detached from the bottom-plate upon request.

The DMA-1265B1 includes a digital "personality module" that reports model number and frequency coverage information for this DF antenna. When connected to any one of the RDF Products "B"-series DF processors (e.g., the DFP-1000B, DFP-1010B, or DFR-1000B), the DMA-1265B1 automatically reports its model number and frequency coverage information. This information is then displayed so that the user can easily avoid out-of-band operation.

The DMA-1265B1 is intended for law-enforcement, surveillance, signal intelligence, frequency management, interference location, search-and-rescue, scientific, and other applications requiring professional-quality radio direction finding equipment.