RDF PRODUCTS

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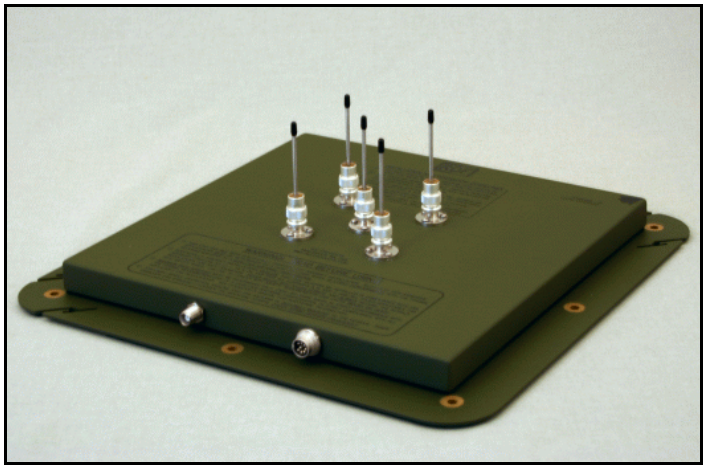
Product Data Sheet; Model DMA-1376B1 *Wide-Coverage UHF Mobile Adcock Radio Direction Finding Antenna (replaces DMA-1418B1)*

FEATURES

- **240-1,000 MHz Continuous Frequency Coverage**
- **True Adcock Design - Does Not Use Inferior Loops**
- **Optimized for Cellular, Pager, and Trunking Bands**
- **2.5° RMS Typical Bearing Accuracy**
- **High Signal Handling Capability**
- **Low-Profile Platform with Removable Aerials**
- **Vehicle Roof-Top or Aircraft Installation**
- **Built-In RS-232 Personality Module**



DESCRIPTION

The RDF Products Model DMA-1376B1 is a 5-aerial UHF monopole Adcock single-channel radio direction finding antenna continuously covering 240-1,000 MHz in a single band. This rugged, compact, light-weight, weather-sealed unit is specifically designed for mobile DF applications and is easily installed on cars, vans, aircraft, 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 removable for convenience of shipping and storage.

Being of a true Adcock design, the DMA-1376B1 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-1376B1 has also been designed with high signal-handling capability for reliable performance in dense signal environments. Sensitivity is optimized for the 700-1,000 MHz cellular, pager, and trunking bands.

The DMA-1376B1 directly interfaces with all RDF Products DF bearing processors via a detachable 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 (central sense)
Frequency Coverage:	240-1,000 MHz continuous
Bearing Accuracy:	3.5 degrees RMS max.; 2.5 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 @ 280 mA (negative ground)
Operating Temperature:	-40 to +60 degrees C
Storage Temperature:	-40 to +70 degrees C
Humidity:	0-100%
Dimensions:	5.0"x15.875"x15.875" (HxWxD; with baseplate less cables)
Weight:	6.0 lbs. (less cables)

Note: Specifications are subject to change without notice.

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APPLICATIONS INFORMATION

The RDF Products Model DMA-1376B1 has been designed as a general-purpose UHF mobile DF antenna. Covering 240-1,000 MHz, this unit offers very wide frequency coverage for UHF applications. Since its most frequent application is likely to be in the 700-1,000 MHz cellular/pager/trunking band, sensitivity has been optimized for that range. This unit replaces the earlier 370-1,000 MHz DMA-1418B1 offering extended low-end frequency coverage and identical performance elsewhere in the specified frequency range.

For vehicle roof-top installations, nylon mounting straps and rain-gutter hooks are supplied. 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-1376B1 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-1376B1 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-1376B1 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.