



Multiband DF Head

Direction Finding for Mastodon SIGINT Products

The Multiband DF Head provides direction-finding capability for Mastodon's entire portfolio of receivers, including Kraken, Beast, and Beast+. Supporting intercept and DF simultaneously in a single head, its small size and weight maximize portability while its rugged, resilient exterior withstands extreme conditions. The unit also features internal modular electronics that allow for the rapid development of additional DF heads to support various profiles and frequency ranges.

Field-Proven Dependability

The Multiband DF is the legacy antenna that Mastodon's Dismount, High Band, and Wideband models were built on. Tried and tested in the full gamut of environments and operations, everything from the resilient housing and connectors to cutting-edge internal components have been carried through to each new iteration's design.

Mission Versatility

With its small size and multiple mounting options, the Multiband DF supports maritime, dismount, mobile, and air operations. Smart design decisions – such as an integrated GPS that reduces cabling – maximize the unit's portability and enhance its feature set.

High Performance

An Internal Inertial Measurement Unit (IMU) supports high metal, pitch and roll environments. For optimal gain, the unit features a built-in LNA as well as bypass ability for high-cosite situations.

Rugged Design

Every part of the Multiband DF Head is built to withstand use in the harshest environments, down to its rugged TNC and MIL connectors. Its hardy design protects against shock and is sealed to prevent water ingress.



Pair the Multiband DF Head with any Mastodon transceiver:



Beast



Beast+



Kraken

Multiband DF Head

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Additional Mastodon DF Solutions

If your mission calls for something other than the Multiband DF Head, Mastodon has developed a full line of direction finding antennas to meet your needs. All of the antennas in our portfolio support intercept and DF simultaneously and are ruggedized for use in a variety of harsh dismount, mobile, and maritime environments.



Dismount Multiband DF Antenna

- 120 MHz-1 GHz frequency range
- 8.9" H x 3.5" D
- 2.25 lbs (without cabling)



Wideband DF Antenna

- 30 MHz-6 GHz frequency range
- 19.5" H x 3.5" D
- ~4 lbs (without cabling)

| Multiband DF Head Specifications | |
|----------------------------------|---|
| Frequency Range | 120 MHz—1 GHz |
| DF Calculation Method | Phase Interferometry |
| Polarization | Vertically Polarized |
| DF Accuracy | Chamber Avg RMS <5° across entire range Real World (Field Tested) Avg RMS <10° across entire range |
| Power Consumption | <4 watts |
| Navigation | Compass, GPS, INS |
| Array Size | 13.6" H x 3.5" D |
| Weight | 3 lbs (10 ft. std. cable adds addtl. 1.3 lbs) |
| Cabling Size | 0.330" diameter |
| Mounting Options | Fixed Plate, Isolation Plate, Vehicular, Dismount |
| Compatible with | Beast, Beast+, Kraken |

| Part Number | Description |
|----------------|------------------------------------|
| MD1004-0001-01 | Multiband DF Head, Flat Dark Earth |
| MD1004-0001-02 | Multiband DF Head, Black |
| MD1004-0001-03 | Multiband DF Head, White |

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Mastodon Design develops technically advanced, user-friendly solutions that meet the rigorous demands of today's military faster, cheaper, and better than anyone in the industry. We combine decades of world-class engineering expertise with real-world Special Operations Forces experience to deliver superior products in a customer-focused environment of agility and responsiveness.