



Wideband DF Head

Direction Finding for Mastodon SIGINT Products

The Wideband DF Head expands direction-finding capabilities for the Mastodon family of tactical SIGINT products with frequency coverage from 30 MHz-6 GHz. Four RF inputs enable simultaneous intercept and DF of near-peer fast frequency hopping signals. The unit also supports 2, 3, or 4-channel phase interferometry and vector methods and features an integrated blanking switch for interference mitigation.

Mission Versatility

Utilizing the same mounting provisions for our legacy DF options, the Wideband 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.

When used in tandem with Beast+ and the Wideband Power Amplifier, the antenna completes a full hardware system solution for EW missions that supports the entire frequency range and SOIs.

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 co-site situations.

Rugged Design

Every part of the Wideband 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 Wideband DF Head with any Mastodon transceiver:



Beast



Beast+



Kraken

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Additional Mastodon DF Solutions

If your mission calls for something other than the Wideband 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.



Original Multiband DF Antenna

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



Dismount Multiband DF Antenna

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

Wideband DF Head Specifications	
Frequency Range	30 MHz—6 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	19.5" H x 3.5" D
Weight	4 lbs (10ft. std. cable adds add'l. 1.3lbs)
Cabling Size	0.330" diameter
Mounting Options	Fixed Plate, Isolation Plate, Vehicular, Dismount
Compatible with	Beast, Beast+, Kraken

Part Number	Description
MD1004-0301-01	Wideband DF Head

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www.mastodondesign.com // Mastodon-info@caci.com



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.