



## DIRECTION FINDING (DF) ANTENNA

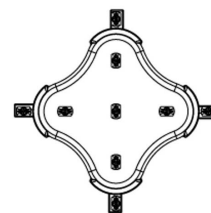
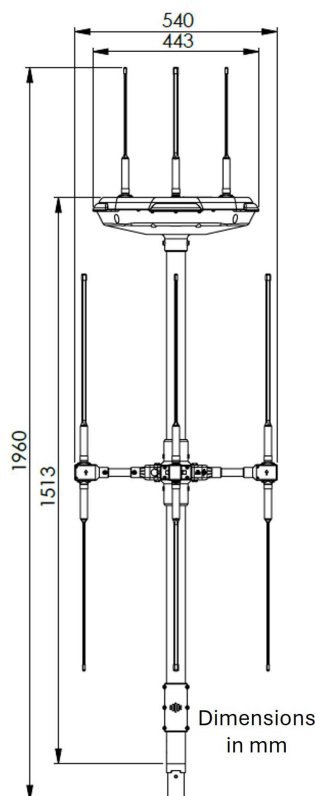
# VHF/UHF DIRECTION FINDING ANTENNA (DFH500)

The DFH500 is a Compact Direction Finding Head that combines high-precision direction-finding (AoA) with wideband spectrum monitoring 2D/3D TDoA in a rugged, tactical format.

The DFH500 provides real-time 30MHz–500MHz line-of-bearing with a typical DF accuracy of  $<2.5^\circ$  RMS. It is compatible with any RFeye Node and spectrum monitoring antennas. It acts as a robust, reliable extension for spectrum monitoring and geolocation of signals of interest, and is well suited for ISR, COMINT, EMCON, communications deconfliction, border and perimeter monitoring, and interference hunting missions.

### Applications

- Operating close to the Forward Edge of Battle Area
- Addressing coverage blind spots
- Short-duration or temporary surveillance
- Short-duration DF or interference hunting
- Supporting existing spectrum monitoring operations
- Delivering tactical DF capability in environments with constrained infrastructure



# TECHNICAL PERFORMANCE

| DF Head            |                   |
|--------------------|-------------------|
| DF frequency range | 30 MHz to 500 MHz |
| DF accuracy        | <2.5° RMS typical |
| Polarization       | Vertical          |

| General Specifications          |                                  |
|---------------------------------|----------------------------------|
| Weight of Low-band DF Head      | 7 kg                             |
| Dimensions of Low-band DF Head  | 550 x 550 x 1720mm               |
| Dimensions of rugged carry-case | 1121 x 409 x 355mm               |
| Power supply                    | 12V DC                           |
| Power consumption               | 10W typical (not including Node) |
| Operating temperature           | -20°C to +55°C                   |

| Mast options for DFH500            |                                |
|------------------------------------|--------------------------------|
| Lightweight Rolatube tripod (2m)   | Weight: 5kg, Head height: 2m   |
| Intermediate AL1 Bluesky mast (2m) | Weight: 27kg, Head height: 2m  |
| Heavyweight AL2 Bluesky mast (6m)  | Weight: 46kg, Head height: 6m  |
| Heavyweight AL2 Bluesky mast (10m) | Weight: 52kg, Head height: 10m |

## Interoperability

The DFH500 is interoperable with other RFeye products, for multi-site monitoring and geolocation. The DFH500 can be used in a network with other RFeye Nodes for TDOA and AOA geolocation.

## Benefits

- Small form-factor
- Low-band DF compact head
- Rapid deployment
- Highly configurable
- Expandable performance
- Intuitive GUI operation with rugged laptop or tablet

# RELATED EQUIPMENT (RAPID DEPLOYMENT KIT)



Mini Outdoor Kit (Green)



2x spectrum monitoring antennas



Mast system



Power, Data, Distribution Module (PDDM)



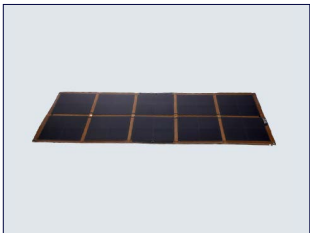
Mounting brackets and fixings



RF and power cables



Bren-Tronics battery



Solar panel with 3-way cable



RFeye® Site Software

CRFS is an RF technology specialist for the defense industry, national security agencies, and systems integration partners. We provide advanced capabilities for real-time spectrum monitoring, situational awareness, and electronic warfare support to help our customers understand and exploit the electromagnetic environment.



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