

HF Loop Quadpod for Mobile Antennas

1 – 200 MHz

Product Code: DF-A0245

VERSION: 1.0



PRODUCT DESCRIPTION

The DF-A0245 is a wideband DF antenna intended for on-the-move direction finding from 1 – 200 MHz.

The quad-pod's performance is enhanced with patented hybrid loop-Adcock technology to provide improved sensitivity vs traditional designs of the same form factor.

The antenna presents patterns suitable for the Watson Watt estimation method, as well as 3-channel correlative DF.

The quad pod has a MIL-DTL-38999 connector interface to allow for base mounting of VUHF modules.

A cavity inside the antenna houses an integrated band switch that allows control and calibration circuitry to be integrated into the antenna. External and internal RF chain calibration is accommodated, and a compass is also integrated in the antenna.

- *CA Application 2,853,219;
- *EP Patent 2771943;
- *U.S. Patent No. 14/353,382;
- *ZA Patent No. 2014/02806

SPECIFICATIONS

Part numbers:		For use with:	
DF-A0245		DF-A0120/ DF-A0201	
DF-A0245-02		DF-A0254/DF-A0257	
Electrical: DF			
Frequency range	1 – 200 MHz		
Channels per band	3		
DF method	Watson-Watt or 3-channel correlative		
RMS accuracy:			
Using full vector	< 2° *		
Polarisation	Vertical		
Elevation coverage	± 15° with accuracy degraded to 3° ± 25° with accuracy degraded to 10° over 80% of the band		
Omni-output	Provided as one of the DF channels **		
Electrical: band switch (fully integrated in antenna)			
Frequency range	1 – 200 MHz		
Control	RS 485, dedicated switching lines		
Switching time	< 10µs when using dedicated lines		
Integrated features	- Compass (accuracy 3°)		
Stored information	Model no., serial no., user data fields		
RF calibration	- Internal noise source - External cal injection option		
Interfaces:			
Connector	MIL-38999 connector on cable		
Antenna outputs	3 x co-axial (size 12 contact)		
Ext cal input	1 x co-axial (size 12 contact)		
Mechanical:			
Dimensions (h x d)	< 700 mm x 2000 mm (incl quadpod)		
Mass	< 6.5 kg		
Environmental: designed to meet the following specifications			
Temperature range	-30 °C to +55 °C (operating) -40 °C to +71 °C (storage)		
Ingress protection	IP65		
Shock and vibration	MIL-STD-810E 516.4, Cat 8, shock 40g		

* When used in a three-receiver configuration, however, < 1° RMS is possible.

** Only for Watson-Watt.

Related Products:

- DFS-A0245
- DF-A0120
- DF-A0201
- DF-A0254
- DF-A0257

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Simulated Sensitivity:

