Compact Adcock DF Antenna

500 – 2000 MHz

Product Code: DF-A0214

VERSION: 1.3

PRODUCT DESCRIPTION:
The DF-A0214 is a single band, compact Adcock DF antenna intended for direction-finding from 500 to 2000 MHz.

The antenna presents patterns suitable for the Watson-Watt estimation method, as well as 3-channel correlative DF (CIDF). The antenna offers an omni-channel output that can also be used for monitoring.

The DF-A0214 combiner board has an integrated noise source for calibration, passive GPS and an electronic compass.

SPECIFICATIONS:

Product Code:	
DF-A0214	**500 – 2000 MHz Adcock DF antenna with combiner board and integrated noise source and GPS**
Electrical: DF	
Frequency range	500 – 2000 MHz
Number of channels	3
DF method	Watson-Watt or 3-channel CIDF
RMS accuracy	< 5° (using only pure WW)*
Polarisation	Vertical
Omni-output	On channel 1
Nominal input impedance	50 Ω
Electrical: Combiner board with integrated noise source (DF-A0124-01)	
Frequency range	500 – 2000 MHz
Control	- RS 485 serial at 115 kbaud
Switching time	< 100 µs using serial commands < 4 µs when using dedicated lines
Integrated compass	Available on RS485 serial. Accuracy 2° RMS
Stored information	Model no., serial no., user data fields
RF calibration	Internal noise source
Power supply	15 ±2 V DC
Power consumption	< 1 W (noise source and compass off)
Interfaces:	
Electrical	Connectors recessed into base of antenna
Antenna outputs	4 x SMA female
Integrated Passive GPS	1 x SMA female
Control and power	MIL-DTL-38999 multi-pin connector
Mechanical	Flange for vehicle or mast-mounting
Mechanical:	
Dimensions (ø x h)	83 mm x 388 mm (including mounting flange)
Total mass	< 2 kg
Environmental: designed to meet the following specifications	
Wind survival	160 km/h (without ice)
Temperature (operation)	-30 ºC to +70 ºC
Vibration and shock	Designed to MIL-STD-810-F for ground vehicles
Water proofing	IP65 rain proof

* Improved accuracy is possible using correlative methods

Notes:
1. RMS accuracy is measured over all azimuth.

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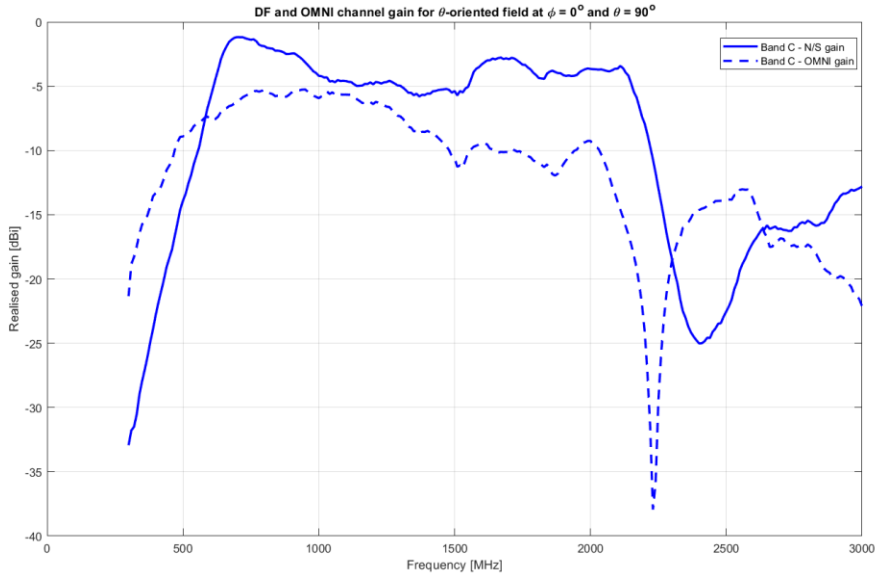
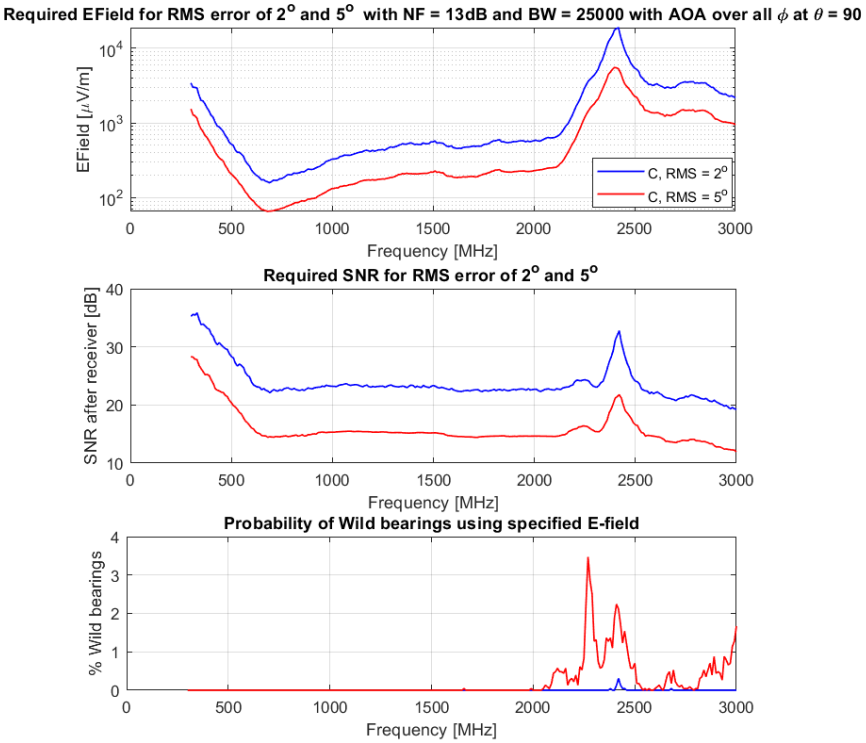
Antenna Channel Gain:



Sensitivity Graph:*



* DF Sensitivity analysis using 3-Channel Correlative (CIDF) estimation

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