

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 omnichannel 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.

Compact Adcock DF Antenna

500 – 2000 MHz Product Code: DF-A0214

SPECIFICATIONS:

Electrical: DFFrequency range $500 - 2$ Number of channels3DF methodWatsonRMS accuracy $< 5^{\circ}$ (usPolarisationVerticalOmni-outputOn charNominal input impedance 50Ω Electrical: Combiner board with integFrequency range $500 - 2i$ Control- RS 48Switching time $< 100 \mu$ Stored informationModel mRF calibrationInternalPower supply $15 \pm 2 V$ Power consumption $< 1 W$ (mInterfaces:ElectricalElectricalConnecAntenna outputs $4 \times SM/$ Integrated Passive GPS $1 \times SM/$ Control and powerMIL-DTMechanical:Elange iDimensions ($\emptyset \times h$) $83 mm$ Total mass $< 2 kg$	
Frequency range $500 - 2$ Number of channels3DF methodWatsonRMS accuracy $< 5^{\circ}$ (usPolarisationVerticalOmni-outputOn charNominal input impedance 50Ω Electrical: Combiner board with integFrequency range $500 - 2^{\circ}$ Control- RS 48Switching time $< 100 \mu$ $< 4 \mu s \nu$ Integrated compassAvailablStored informationModel nRF calibrationInternalPower supply $15 \pm 2 V$ Power consumption $< 1 W$ (nInterfaces:ElectricalElectricalConnecAntenna outputs $4 \times SM/$ Integrated Passive GPS $1 \times SM/$ Control and powerMIL-DTMechanical:Dimensions ($\emptyset \times h$)Bis mm $< 2 kg$ Environmental: designed to meet the	Watt or 3-channel CIDF ng only pure WW)* nel 1 rated noise source (DF-A0124-01)
Frequency range $500 - 2$ Number of channels3DF methodWatsonRMS accuracy $< 5^{\circ}$ (usPolarisationVerticalOmni-outputOn charNominal input impedance 50Ω Electrical: Combiner board with integFrequency range $500 - 2^{\circ}$ Control- RS 48Switching time $< 100 \mu$ $< 4 \mu s \nu$ Integrated compassAvailablStored informationModel nRF calibrationInternalPower supply $15 \pm 2 V$ Power consumption $< 1 W$ (nInterfaces:ElectricalElectricalConnecAntenna outputs $4 \times SM/$ Integrated Passive GPS $1 \times SM/$ Control and powerMIL-DTMechanical:Dimensions ($\emptyset \times h$)Bis mm $< 2 kg$ Environmental: designed to meet the	Watt or 3-channel CIDF ng only pure WW)* nel 1 rated noise source (DF-A0124-01)
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Electrical: Combiner board with integFrequency range $500 - 2$ Control- RS 48Switching time< 100 μ < 4 μ s vIntegrated compassAvailablStored informationModel nRF calibrationInternalPower supply15 \pm 2 VPower consumption< 1 W (n	
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Frequency range $500 - 2$ Control- RS 48Switching time< 100 μ < 4 µs v	
Control- RS 48Switching time< 100 μ < 4 µs v	
Switching time< 100 μ < 4 µs v	5 serial at 115 kbaud
< 4 μ s vIntegrated compassAvailableStored informationModel mRF calibrationInternalPower supply15 ±2 VPower consumption< 1 W (m	s using serial commands
Integrated compassAvailableStored informationModel mRF calibrationInternalPower supply $15 \pm 2 V$ Power consumption< 1 W (m	hen using dedicated lines
Stored informationModel nRF calibrationInternalPower supply $15 \pm 2 V$ Power consumption< 1 W (n	e on RS485 serial. Accuracy 2° RMS
RF calibrationInternalPower supply $15 \pm 2 \lor$ Power consumption $< 1 \And (n)$ Interfaces:ElectricalElectricalConnecAntenna outputs $4 \times SM/$ Integrated Passive GPS $1 \times SM/$ Control and powerMIL-DTMechanicalFlangeDimensions ($\emptyset \times h$)83 mmTotal mass $< 2 kg$	o., serial no., user data fields
Power consumption < 1 W (interfaces:	noise source
Power consumption < 1 W (note: 100 minimum for the second sec	DC
Electrical Connect Antenna outputs 4 x SMA Integrated Passive GPS 1 x SMA Control and power MIL-DT Mechanical Flange Dimensions (ø x h) 83 mm Total mass < 2 kg	oise source and compass off)
Electrical Connect Antenna outputs 4 x SMA Integrated Passive GPS 1 x SMA Control and power MIL-DT Mechanical Flange Dimensions (ø x h) 83 mm Total mass < 2 kg	
Antenna outputs 4 x SM/ Integrated Passive GPS 1 x SM/ Control and power MIL-DT Mechanical Flange Dimensions (ø x h) 83 mm Total mass < 2 kg	
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Control and powerMIL-DTMechanicalFlangeMechanical:Dimensions (Ø x h)Dimensions (Ø x h)83 mmTotal mass< 2 kg	female
Mechanical: Dimensions (ø x h) 83 mm Total mass < 2 kg	-38999 multi-pin connector
Dimensions (ø x h) 83 mm Total mass < 2 kg	or vehicle or mast-mounting
Dimensions (ø x h) 83 mm Total mass < 2 kg	
Total mass < 2 kg	
Environmental: designed to meet the	388 mm (including mounting flange)
	following specifications
	h (without ice) o +70 ⁰C
	d to MIL-STD-810-F for ground
VIbration and snock Designed vehicles	u will-SID-010-F for around
Water proofing IP65 rai	

Notes:

1. RMS accuracy is measured over all azimuth.



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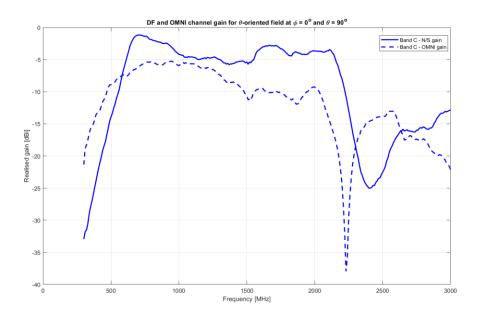
Alaris Antennas has a policy of continuous improvement and hence specifications may change without notice

Compact Adcock DF Antenna

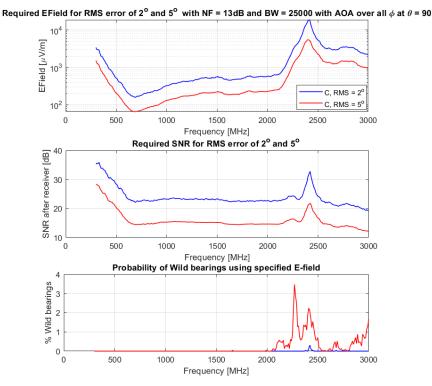
500 – 2000 MHz

Product Code: DF-A0214

Antenna Channel Gain:



Sensitivity Graph:*



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

GAIN THE ADVANTAGE

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