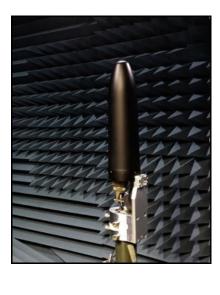


# Compact 4-Channel DF Antenna

20 - 6000 MHz

Product Code: DF-A0303

**VERSION: 1.2** 





### PRODUCT DESCRIPTION:

The DF-A0303 is a tri band, compact DF antenna intended for manpack direction-finding on the move from 20 MHz to 6000 MHz.

The antenna presents patterns suitable for 4-channel correlative DF (CDF).

The DF-A0303 has a low noise amplifier on each channel with passive bypass capability, an integrated noise source or optional external signal can be used for downstream RF chain calibration and also includes a navigation and GPS.

\*CA Application 2,853,219;

\*EP Patent 2771943;

\*U.S. Patent No. 14/353,382;

\*ZA Patent No. 2014/02806

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Mechanical:		
Dimensions (ø x h)	See outline below	
Total mass	< 1.2 kg incl bracket	
Environmental: designed to meet the following		
specifications		
Wind survival	160 km/h (without ice)	
Temperature (operation)	-30 °C to +70 °C	
Vibration and shock	Designed to MIL-STD-810F	
	for ground vehicles	
IP Rating	IP66	

#### **SPECIFICATIONS:**

Product Code:			
DF-A0303	RS485 communica	tion interface	
DF-A0303-02	USB V2.0 communication interface, 64		
	MB onboard memo		
DF-A0303-05	USB V2.0 communication interface, integrated inertial navigation system and 64 MB onboard memory		
		<b>,</b>	
Electrical: DF			
Frequency range	20 – 6000 MHz		
	Band B: 20 - 500 MHz		
Frequency bands	Band C: 400 - 2000 MHz		
	Band D: 2000 - 6000 MHz		
Number of channels	4		
DF method	4-channel CDF		
RMS accuracy	2° RMS		
Polarisation	Vertical		
	50 Ω		
Nominal input impedance	00 12		
Electrical:	DF-A0303	DF-A0303-02 / -05	
Frequency range	DF-A0303 DF-A0303-027-05 20 – 6000 MHz		
RF Amplification Gain	•••••	± 2 dB	
	RS 485 serial at	- <del></del>	
Control	115 kbaud	USB V2.0	
Suitable a time		4 OF 110	
Switching time	< 100 µs using	< 25 µs	
	serial commands		
	< 5 µs when using dedicated lines		
	dedicated lines	<u> </u>	
Integrated features:	DF-A0303 / -02	DF-A0303-05	
Navigation	Integrated	Integrated GPS/INS <sup>1</sup>	
Navigation	compass	unit.	
	Heading accuracy	Heading accuracy	
	2° RMS	0.3° RMS	
GPS Antenna	·	.4	
OI O AIRCINA	Active (L1)  DF-A0303  DF-A0303-02 / -05		
Onboard Storage	Model no., serial	64MB flash in	
Onboard Storage	no., user data	addition to Model no.,	
	fields	serial no.,	
	licius	user data fields	
Programming interface	None	to integrated micro	
1 Togramming interrace	INOHE	controller	
RF calibration	RF chain calibration	- <del></del>	
N Calibration	RF chain calibration using Integrated noise source or external applied signal		
Power supply		opiidu sigilal	
Power supply	6 - 18 V DC		
Power consumption Interfaces:	< 3W		
	MIL DTI 20000	ti nin oonnost	
Connector	MIL-DTL-38999 multi-pin connector		
Antenna outputs	4 x co-axial		
Integrated GPS (-05 only)	1 x co-axial		
Ext cal input	1 x co-axial		
Control and power	4 x digital		
Programming		4 x digital (DF-A0303-02 / -05 only)	
Mechanical Removable flange for vehicle or ma		or vehicle or mast-	
	mounting		
	Various sockets for tripod / gooseneck		
	(1/4-20 UNC, 3/8-16 UN	NC, M10-6H, 3x M5-6H)	

Notes:

<sup>&</sup>lt;sup>1</sup> VN-200 GPS/INS

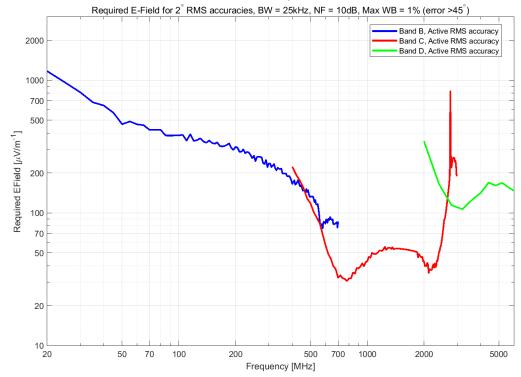
## **Compact 4-Channel DF Antenna**

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### Sensitivity:

### DF-A0303 - DF Sensitivity with Correlative DF



20 - 6000 MHz

Product Code: DF-A0303 VERSION: 1.2

### **Mechanical Outline:**

