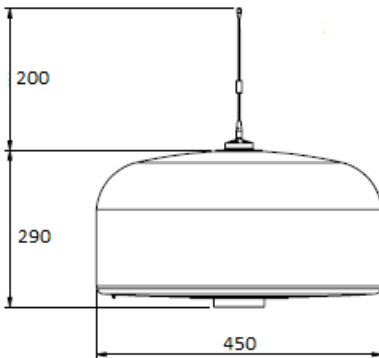


Compact DF antenna

1 – 3000 MHz

Product Code: DF-A0143

VERSION: 1.4



PRODUCT DESCRIPTION:

The DF-A0143 is a wide band (1 – 3000 MHz), ruggedized mobile DF antenna. It is intended for variety vehicular platforms, for example, small tactical vehicles (dune buggies, two or three wheeled vehicles), vans, Humvees and could be used on airborne structures.

The antenna uses a combination of crossed-loop and Adcock array principle for the various bands providing maximum possible sensitivity for its compact form factor. Please note that corrected WW and correlative interferometric DF could be used for enhanced performance.

A dedicated Omni output provides a monitoring capability for signal interception and demodulation.

A cavity inside the antenna houses an integrated band switch that allows control and calibration circuitry to be integrated into the antenna.

*CA Application 2,853,219;

*EP Patent 2771943;

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

*ZA Patent No. 2014/02806

SPECIFICATIONS:

Electrical: DF antenna	
Frequency Range	1 – 3000 MHz
Band A	1 – 250 MHz, Loops
Band B	250 – 1500 MHz, Monopoles
Band C	1500 – 3000 MHz, Dipoles
DF method	Wattson-Watt or CIDF
Number of bands	3
Number of channels	3
RMS accuracy	< 5° (using only pure WW)*
Omni output	Channel 1 on all bands
Electrical: Band switch	
Frequency Range	1 - 3000 MHz
Control	- RS 485 serial at 115 kbaud - Dedicated switching lines.
Switching time	< 100 µs using serial commands < 5 µs when using dedicated lines
Stored information	Serial number
Power supply	12 V DC
Power consumption	< 1 W
Internal noise source power output	40 ± 5 dB ENR
Interface:	
Electrical	MIL-DTL-38999 connector 3 x RF (DF) 1 x RF (CAL) 1 x RF (GPS) 2 x Power 2 x Switch control 4 x RS485
Mechanical	Flange for vehicle mounting
Mechanical:	
Total Mass	4.2 kg
Dimensions (h x d)	490 x 450 mm
Environmental:	
Temperature Range	-30° C to +70° C
Shock	40 G for 10 ms
Water Ingress Rating	IP65

* Improved accuracy is possible using correlative methods

PRODUCT FEATURES:

- Super compact
- Low profile
- Light weight, < 4.2 kg
- Wideband coverage
- Internal solid-state band and noise switch

APPLICATIONS:

- Mobile direction finding
- Wideband monitoring