



DFA 5080

Direction-finding antenna

MF

HF

0.5 MHz – 30 MHz

The DFA 5080 is an active direction-finding antenna supporting the Watson Watt direction-finding method. It features high bearing accuracy for ground and sky waves across 0.5 to 30 MHz. This system is well-suited for semi-mobile deployments. Its sensitivity and bearing accuracy are comparable with stationary passive systems. This antenna can be configured with a second antenna array to improve precision and sensitivity across the entire frequency range.

TECHNICAL HIGHLIGHTS

- active high-precision antenna with low noise amplification
- mobile and lightweight antenna elements with ground network
- additional 8 antenna elements for precision and sensitivity improvement (optional)

CUSTOMER ADVANTAGES

- sensitivity and bearing accuracy are comparable with stationary passive systems
- quick assembly time of less than 1 hour on almost any surface makes it well suited for semi-mobile use
- available either as a single circular array or as a dual concentric array for increased accuracy across the entire frequency range

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DFA 5080	
DF frequency range	0.5 MHz – 30 MHz
Subrange VLF/LF/MF	n/a
System sensitivity	n/a
DF accuracy	n/a
Subrange MF/HF	0.5 MHz – 30 MHz
System sensitivity	1 MHz – 8 MHz typ. 1 µV/m 8 MHz – 30 MHz typ. 100 nV/m
DF accuracy	≤1° RMS (single array. Ø 7m. 7 – 30 MHz) ≤2° RMS (single array. Ø 10m. 1 – 30 MHz) ≤1° RMS (single array. Ø 30m. 0.5 – 7 MHz) ≤1° RMS (dual array. Ø 7m + 40m. 0.5 – 30 MHz)
Subrange VHF	n/a
System sensitivity	n/a
DF accuracy	n/a
Subrange VHF/UHF	-
System sensitivity	n/a
DF accuracy	n/a
Subrange UHF	-
System sensitivity	n/a
DF accuracy	n/a
Subrange SHF	-
System sensitivity	n/a
DF accuracy	n/a
DF method	Watson-Watt
Antenna type	active
Antenna configuration	U - Adcock
Antenna elements	8/16
Channels	3/5
Polarisation	vertical
Omnidirection monitoring Antenna/output	n/a
BITE	via LAN (SNMP), self - test (web interface)
Operating temperature	-40° to +55° C
Storage temperature	-40° to +70° C
Environmental protection	IP 55
Maximum wind velocity (w/o icing)	180 km/h (50 m/s)
Power consumption	100 V – 230 V AC (24 V on request) single array 100 W, dual array 200 W
Weight	250 kg/ 350 kg
Diameter	15 m – 45 m
Height	2300 mm
Required space	3000 m ²
Installation	self supporting
Set-up time	up to 30 min