

SIGN4L

ECHO 360



Advanced technology direction finder, accurately determining direction of threats.

SPECIFICATIONS

USE CASE

- Detect and follow radio signals, enabling threat identification and tracking.
- When used alongside SIGINT, the Direction Finder system supplies accurate information for enemy communication interception.

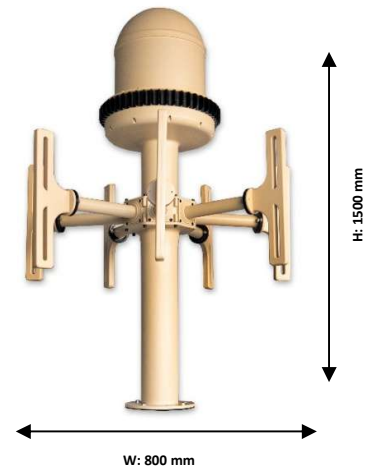
KEY FEATURES

- Frequency Range 100MHz – 6GHz
- Tactical System User Interface
- 160MHz Instantaneous Bandwidth
- High Performance, Integrated, Low Power <150Watt
- 7 Channel Instantaneous Capture

COMPONENTS

- Indoor equipment to be installed in 19” compliant rack (3U space)
- Direction Finding mountable mast.

Equipment	W mm	H mm	W kg
DF (DAQ + BSU)	-	-	< 35
DF Antenna System	800	1500	-



SPECIFICATIONS^①

Hardware								
Frequency Range	100MHz to 6000MHz							
Receiver Channel Topology	7 channels							
DF Algorithm	Correlative Interferometry							
Polarization	Vertical							
DF Accuracy in Reflection-free Environment	V/UHF					SHF		
	100 – 1000MHz			1 – 3 GHz		3 – 6 GHz		
	≤ 2° rms (typical) ¹			≤ 2° rms (typical) ¹		≤ 2° rms (typical) ¹		
Instantaneous Bandwidth (MHz)	160	80	40	20	8	4	2	1
	200 100	100 50 25	50 25 12.5	25 12.5 6.25	5 2.5	2.5 1.25	2.5	1.25
Minimum Resolution	1.25Khz							
Effective DF Scan Rate (MHz/s)	≤ 500GHz/s @ 80MHz BW, 25kHz Res							
Bearings per second	≤ 20,000,000/s							
Minimum Signal Duration	≥ 40 μsec @ 80MHz BW, 25kHz Res							
Demodulation Bandwidth (3 dB)	160MHz IF (8 sub channels selectable – 1MHz BW)							
Power Supply	12 – 48 DC							
Power Consumption	< 150W							
Connectivity	Ethernet over fiber							
Environmental	Designed for IP64 and MIL-STD-810G							
Software								
Interface	Server / Client architecture							
Display Options	Spectrum Detection Waterfall Direction Waterfall							
DF Modes	Instantaneous							
Features	Max Hold Noise Floor Average Noise Floor Detection (Noise Floor Riding) Frequency Blocking Sectorial Blocking Frequency Tuning BW & Resolution Control							
Gain Control	Manual Automatic							
Self Monitoring	Built-In-Test with Alarms							
Command and Control	C2 Ready							

^① All specifications provided herein are indicative values and figures, and there may be reasonable deviation from the same.

¹ Dependent on Antenna Characterization and Compass Calibration

DEPENDENCIES

- GPS visibility
- When used in combination with nearby jammer, mute indication must be provided in order to protect the Direction Finder.
- 3U space in rack for server and PSU must be provided by end user.