

Our **BBH series** broadband magnetic field antennas are designed to provide maximum sensitivity for receiving magnetic field signals in the VLF through VHF spectrum. These antennas are responsive primarily to the magnetic component of an electromagnetic field with practically no sensitivity to the electric component. The electrical balance with respect to ground and cable renders them almost immune to common mode interference.

BBH antennas are ideally suited for use with automatic noise measuring equipment requiring magnetic field sensors, vehicular surveillance applications, elementary direction finding on ground waves, location of obscure noise sources, and for accurate measurement of magnetic field intensity at practically all radian distances from the source. They exhibit remarkably clean reception inside of buildings, at some depth below the earth's surface, in badly cluttered areas, and in environments of locally generated man-made noise.



BBH-500/B

The far-field receiving pattern is that of an elementary dipole with nulls of approximately -20 dB occurring off the ends of the rod.

Integral active networks ensure the highest possible sensitivity in **BBH antennas**. Additionally, **BBH** antennas yield much greater accuracy in measuring the tangential field of a source at close range than the typical air core loop because the response of the air core loop becomes adulterated by the incident electric field. All **BBH** antennas, except for the **BBH-500**, cover the entire frequency range of operation in a single band. A switch on the **BBH-500** allows the low and high bands to be used either separately or simultaneously depending on performance requirements.

A calibration loop/port is provided for verifying that the antenna is functioning properly. An internal power supply and rechargeable batteries in these antennas permit operation under practically any condition, with a minimum amount of setup time. **BBH series** antennas are ideally suited for TEMPEST and other EMC testing applications requiring broadband H-field measurements.

SPECIFICATIONS

Polarization: Linear. Senses H-field in direction of ferrite rod.

Impedance: 50 ohms, nominal.

Power Supply: Internal Rechargeable.

	BBH-500/B	BBH-1100/A	BBH-3100/A
FREQUENCY	300 Hz - 100 MHz	100 Hz - 100 MHz	300 Hz - 100 MHz
DYNAMIC RANGE (dB)	103	115	115
CONNECTOR	BNC Female	BNC Female	BNC Female
SIZE	25"W x 9"H	25"W x 6.5"H	25"W x 6.5"H
WEIGHT LBS (KG)	21 lbs (9.5 kg)	15 lbs (7 kg)	15 lbs (7 kg)

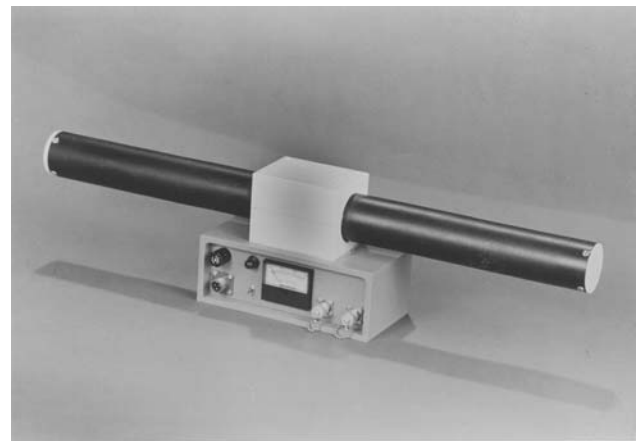
OPTIONS

BBH-500, 1100, 3100 Series:

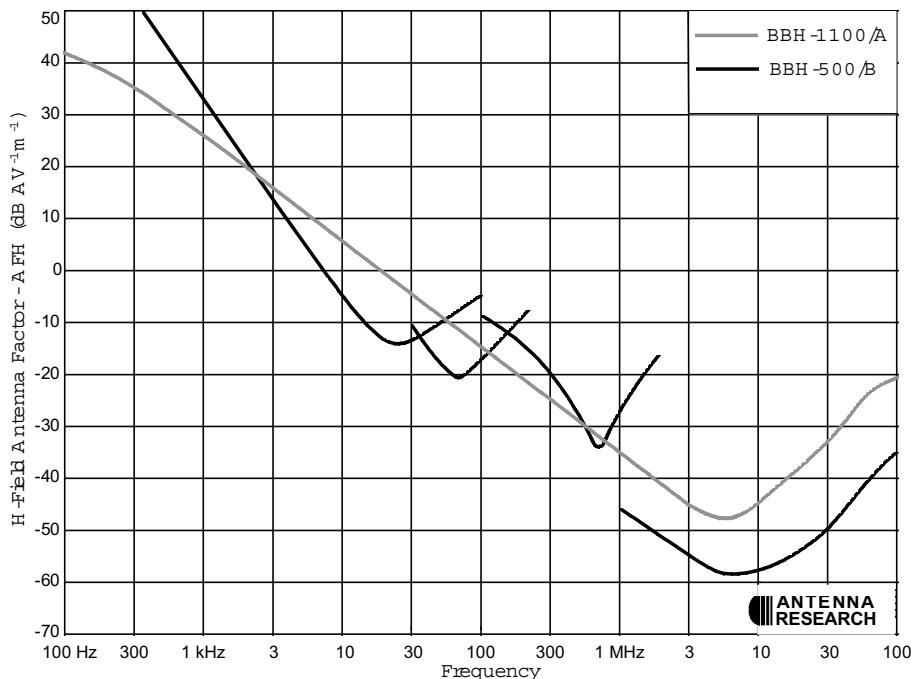
- 1) 230 volt ac operation.
- 2) Tripod TP-5.

Note: 115/230 volt ac operation is standard on the BBH-500/B.

* Calibration port is standard in BBH series antennas



BBH-1100/A



BBH-500/B and BBH-1100/A
Typical H - Field Antenna Factor

Typical Sensitivity Minimum Detectable H-Field (Referenced to 1 kHz Bandwidth)		
Freq.	BBH-500/B MDF (dB uA/m)	BBH-1100/A MDF (dB uA/m)
300	47	30
1 kHz	24	18
3	9	7
10	-6	-5
30	-13	-16
100	-16	-30
300	-20	-40
1 MHz	-26	-48
3	-55	-52
10	-58	-51
30	-50	-49
100	-35	-45