



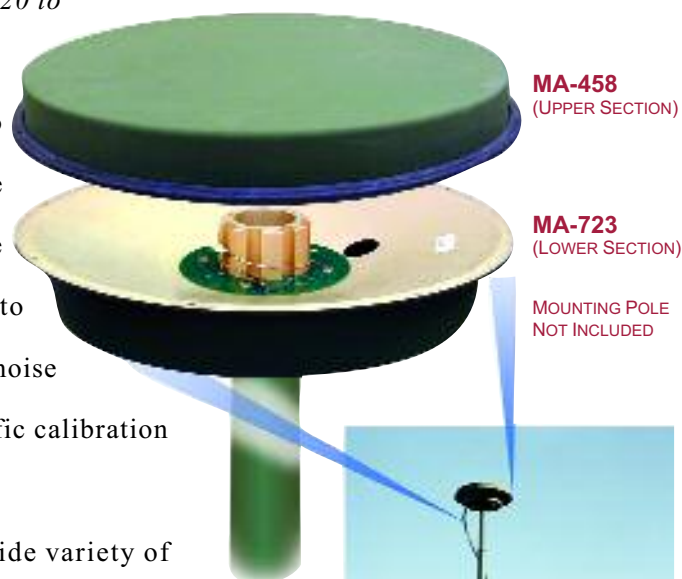
MA-458/MA-723 VHF/UHF DF Monitor Antenna

The MA-458/MA-723 VHF/UHF DF Monitor Antenna provides both accurate direction finding (DF) and matching monitoring over the 20 to 2,000 MHz frequency range.

The MA-458 DF antenna consists of three antennas: two multiple feed slot antennas for the principle VHF coverage and a disk monopole array for the higher frequency range. The MA-723 monitor antenna uses a modified disc-cone design to provide two-decade coverage. The antennas also contain low-noise preamplifiers, built-in test (BIT) circuitry, and antenna-specific calibration data.

The ruggedized MA-458/MA-723 is compatible with a wide variety of Linkabit's systems and processors, including the AN/PRD-13(V) SIGINT Manpack System (SMS).

The MA-458 is designed to work on various vehicles, including high-mobility multi-wheeled vehicles (HMMWVs) and fast patrol boats. It may be mounted on the ground or on a mast. A combined digital control and RF cable connect the MA-458 to the receiver/processor.



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MA-458/MA-723 VHF/UHF DF Monitor Antenna Features

Performance Characteristics	
Frequency Coverage	20–2,000 Mhz
Azimuth Coverage	360°
Elevation Coverage	0° to 60°
Polarization	Vertical
Bearing Accuracy ¹	5° RMS
Bearing Sensitivity ²	20–1,000 Mhz: 25 dBµV/m 1,000–2,000 MHz: 30 dBµV/m
Output Impedance	50 Ohms unbalanced
Preamplifier	Selectable (In/Out) Gain: 20 dB typical NF: 4.5 dB typical IP ₃ : +36 dBm typical
Connectors	Combined RF and control, MIL-C-38929 twist on
Physical and Environmental Characteristics	
Size	914.4 dia. x 114.3 ht., mm (36 dia. x 4.5 ht., in.)
Weight	15.87 kg (35 lbs.)
Power	12 VDC, 2.5 Watt typical, 7 Watts blocked
Temperature	Operating: –40° to +50° C Storage: –50° to +70° C
Humidity	0 to 100%
Altitude	7,260 m (25,000 ft)
Shock/Vibration	Designed to MIL-STD-810E (aircraft and maritime)

¹ Test range, AM demodulator, 0.25 sec. integration, 20 dB S/N, 0° elevation

Note: Intrinsic accuracy of antenna only. Does not include platform effects.

² Test range, AM demodulator, 6° RMS jitter, 1 sec. integration, 0° elevation.

Bearing accuracy and sensitivity in operational situations are subject to the effects of installation, proximity of large conductive objects, terrain, and elevation.

Specifications subject to change without notice

Note: All specifications subject to change without notice

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