

EM-6006 | Antenna Kit, Rugged, 5kHz – 43.5GHz



Description

The EM-6006 rugged antenna kit provides all the antennas and accessories needed to cover the entire frequency spectrum from 5kHz to 43.5GHz. The EM-6006 kit remains compact and lightweight while providing the performance and durability required. All antennas and the kit as a whole have passed or are currently undergoing MIL-STD-810H testing.

Specifications

Electrical

Kit Frequency Range: 5kHz – 43.5GHz

Impedance: 50Ω, Nominal

Kit Contents

EM-6841 Omni-Directional Antenna

EM-6964 Hand-Held Log Periodic Antenna

EM-6902 Magnetic Field Antenna

EM-6906 Magnetic Field Antenna

EM-6844 Long Wire Antenna

EM-6134 Tripod

EM-1317 (10ft) 2.92mm Coax Cable (QTY 2)

EM-1321 (10ft) N-Type Coax Cable (QTY 3)

XF-N200 Tripod Adapter

Mechanical

Dimensions:

W x L x H: 31.2" x 20.4" x 12.2"

Weight: 53.8 lbs.

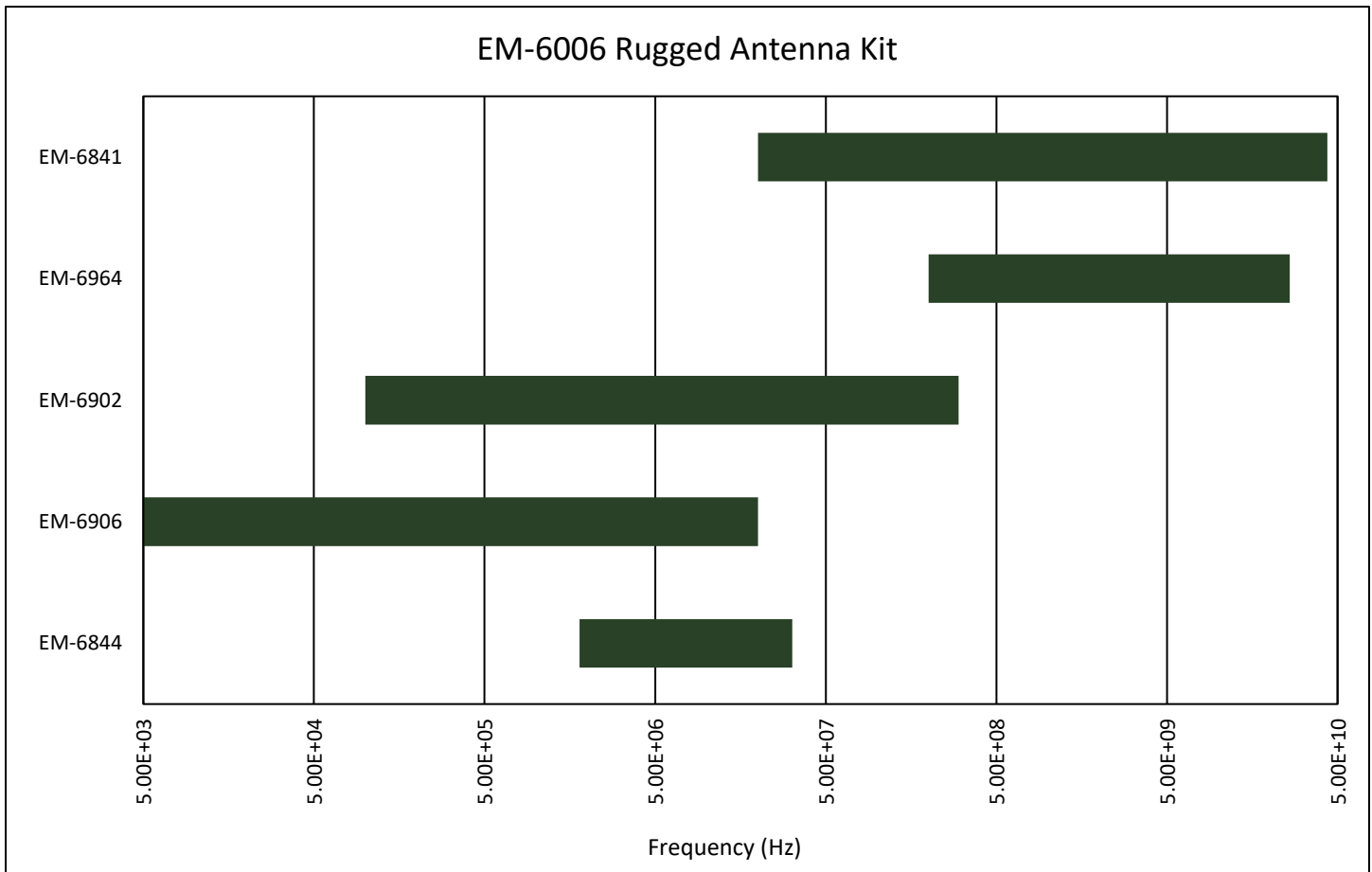
Color Options:

- Black (default)
- Custom colors available upon request

Specifications subject to change without notice, unless otherwise specified. Product is manufactured in Johnstown, NY, U.S.A.



EM-6006 | Antenna Kit, Rugged, 5kHz – 43.5GHz



The antennas EM-6964, EM-6902, EM-6906 and EM-6844 have undergone and passed the following environmental tests, in accordance with MIL-STD-810H. Please contact Electro-Metrics for the detailed report.

The EM-6841 and the entire EM-6006 kit are currently undergoing the same MIL-STD-810H testing for the following tests:

Test 1: High Temperature Storage

Test 2: High Operational Temperature

Test 3: Cold Temperature Storage

Test 4: Blowing Rain

Test 5: Blowing Sand

Test 6: Off-Road Vibration

Test 7: Jet Aircraft Vibration

Test 8: Functional Shock

Test 9: Transportation Shock

Test 10: Transit Drop Shock

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EM-6841 | Antenna, Rugged, Ultra-Wideband, Passive, Omni-Directional



Description

The Electro-Metrics EM-6841 is a Rugged Ultra-Wideband Passive Antenna with Omni-Directional radiation patterns covering the frequency range of 20MHz-43.5GHz.

The EM-6841 is environmentally hardened and is currently undergoing MIL-STD-810H environmental testing for: Hot Temperature, Cold Temperature, Blowing Rain, Blowing Sand, and Shock, and Vibration.



Specifications

Electrical

Frequency Range: 20 MHz – 43.5 GHz

VSWR: Average 2.3:1 above 400 MHz

3dB Beamwidth: 360° Azimuth (Omni-Directional)

45° Average Elevation (70° - 30° Typical)

Impedance: 50Ω, Nominal

Gain: 150MHz-40GHz Nominal > 0dBi

@100MHz Nominal -16dBi

@20MHz Nominal -44dBi

Connector: Type 'K' (EM-6841 | 20MHz-40GHz)

SMA (EM-6841-2 | 20MHz-26GHz)

Type 'N' (EM-6841-1 | 20MHz-18GHz)

Mechanical

Dimensions:

Overall Length: 36.8 cm (14.5")

Diameter: 11.5 cm (4.5")

Weight: 1.37 kg (3.02 lbs.)

Mounting Options Available:

(4) 3/8 – 16 TPI Bolts (included)

XF-N200 1/4 – 20 Tripod Mount (included)

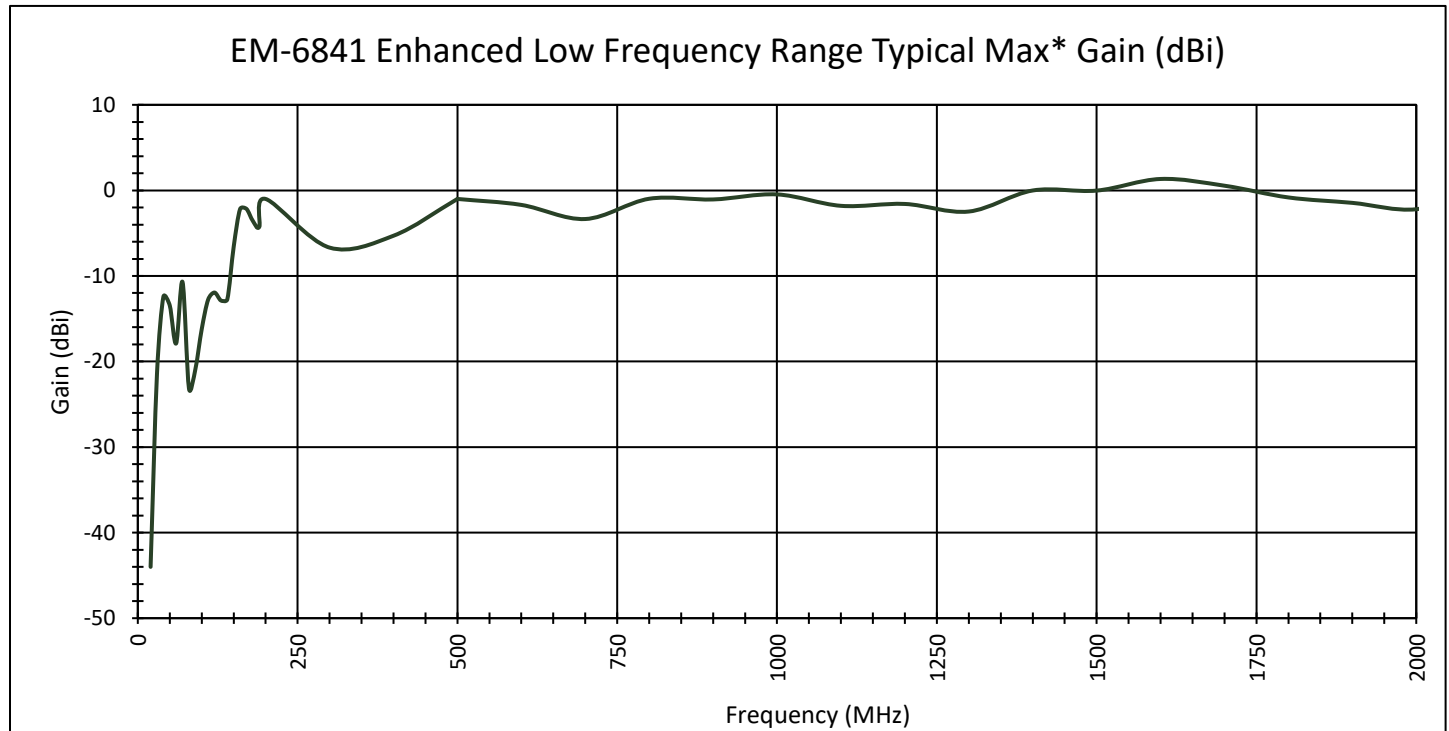
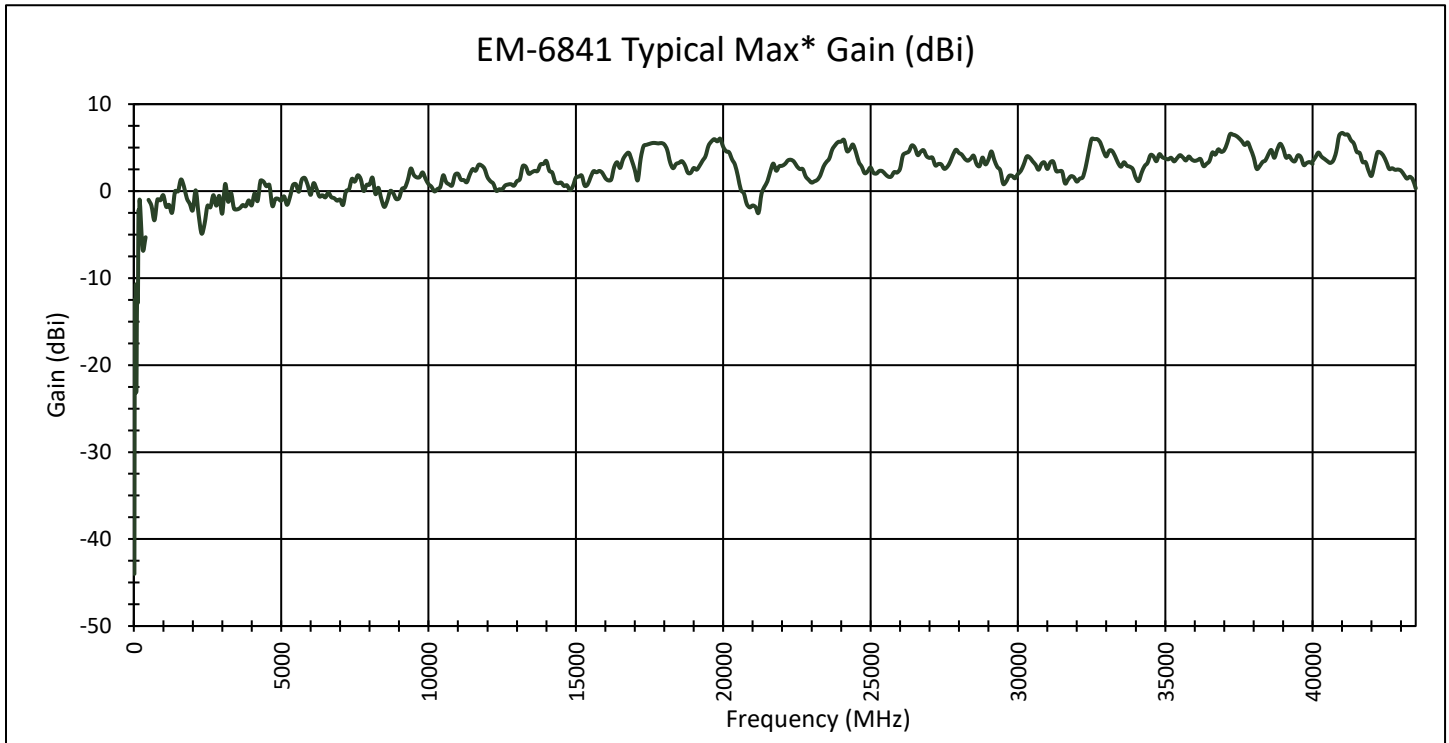
Color Options:

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EM-6841 | Antenna, Rugged, Ultra-Wideband, Passive, Omni-Directional

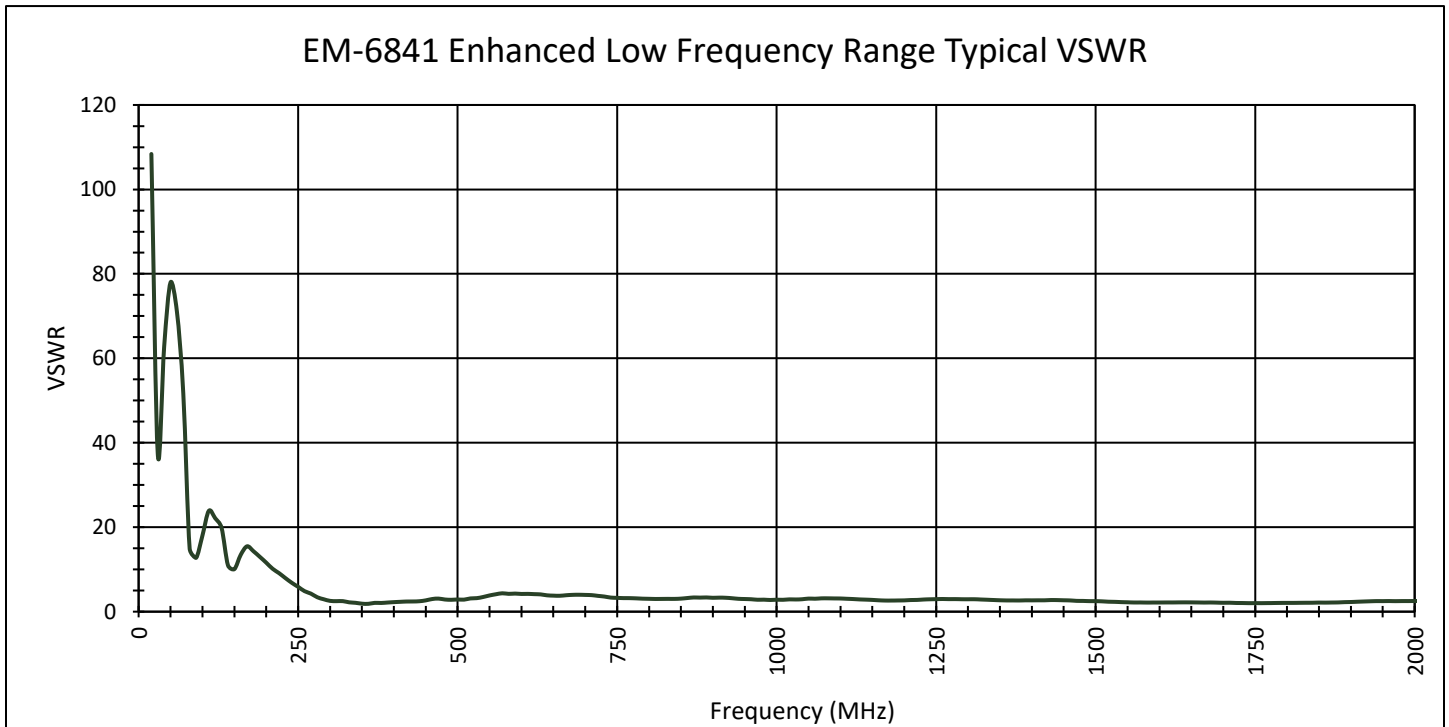
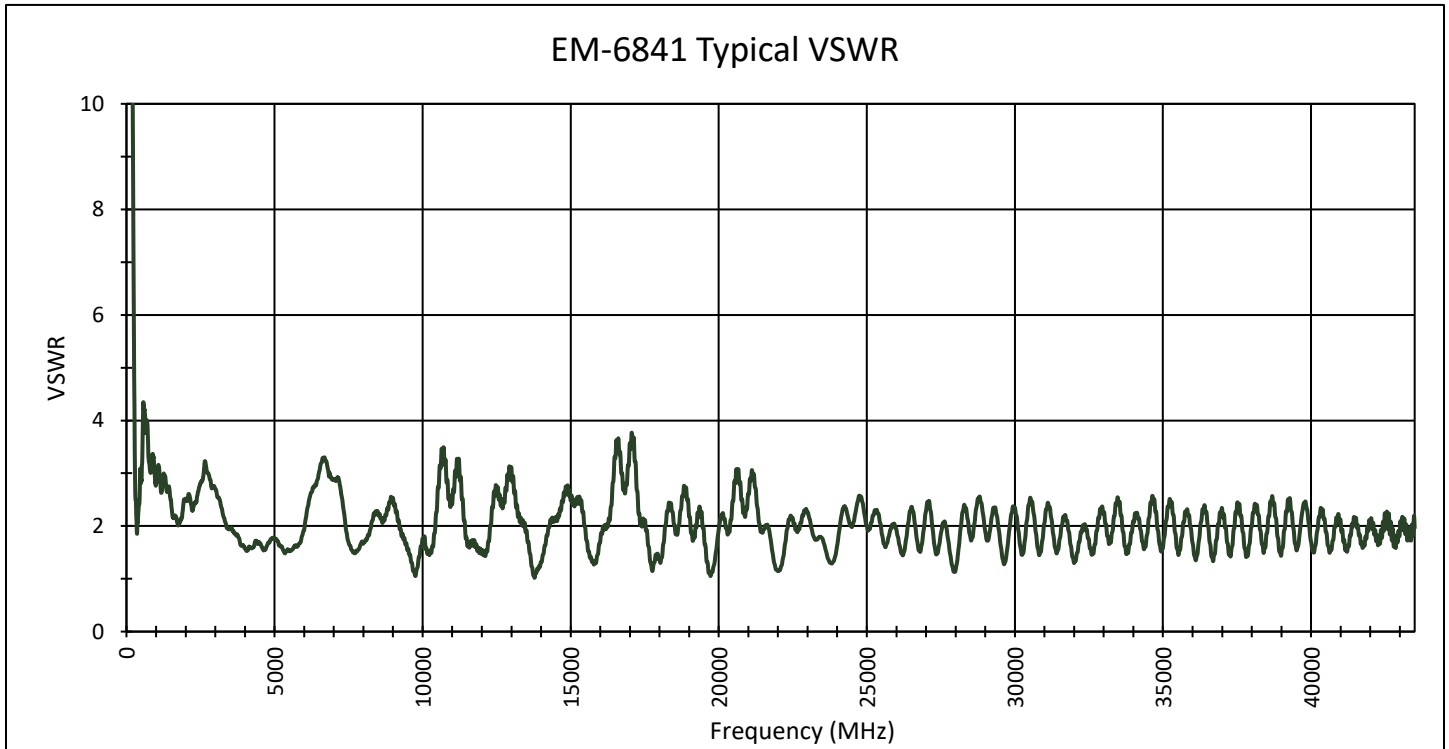


*Maximum Gain determined from scans at all radiation angles and elevations. Data shown is typical, not guaranteed.

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EM-6841 | Antenna, Rugged, Ultra-Wideband, Passive, Omni-Directional

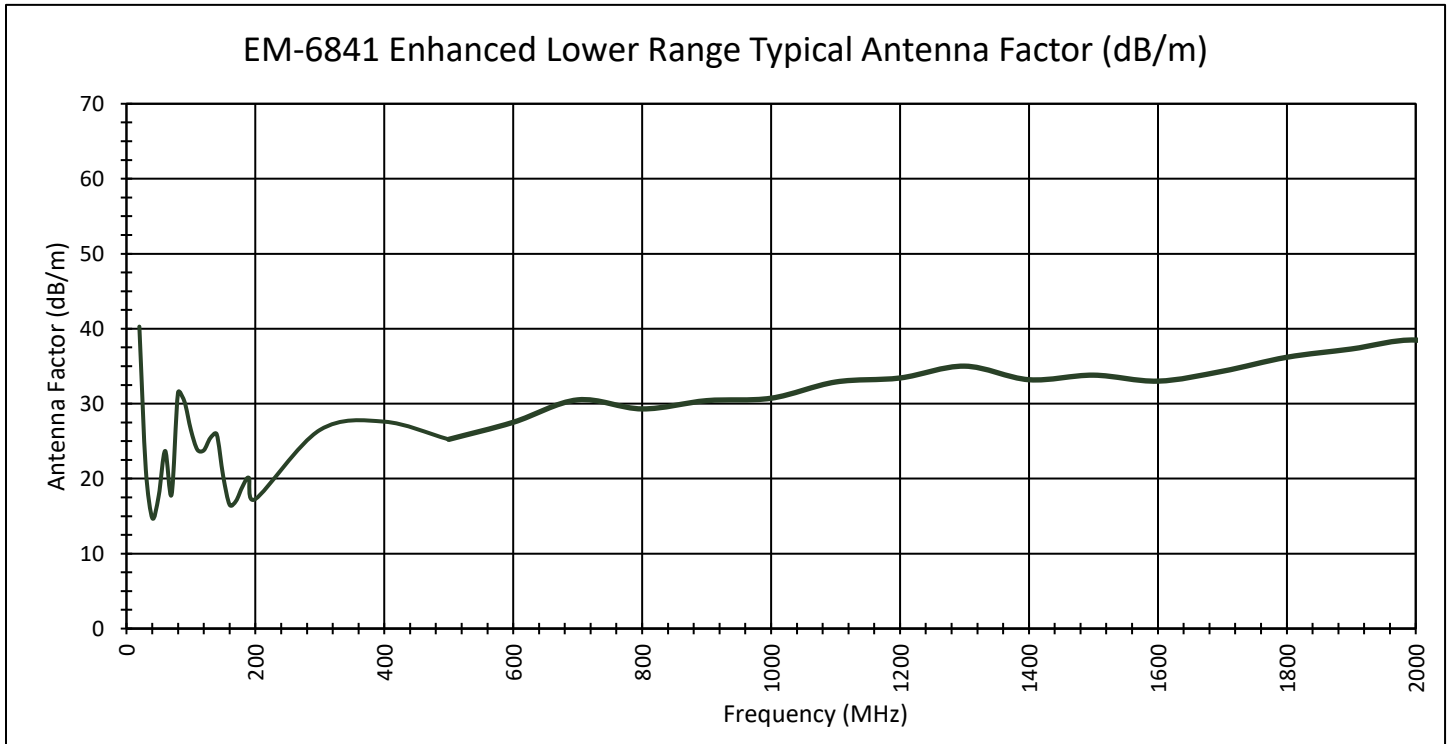
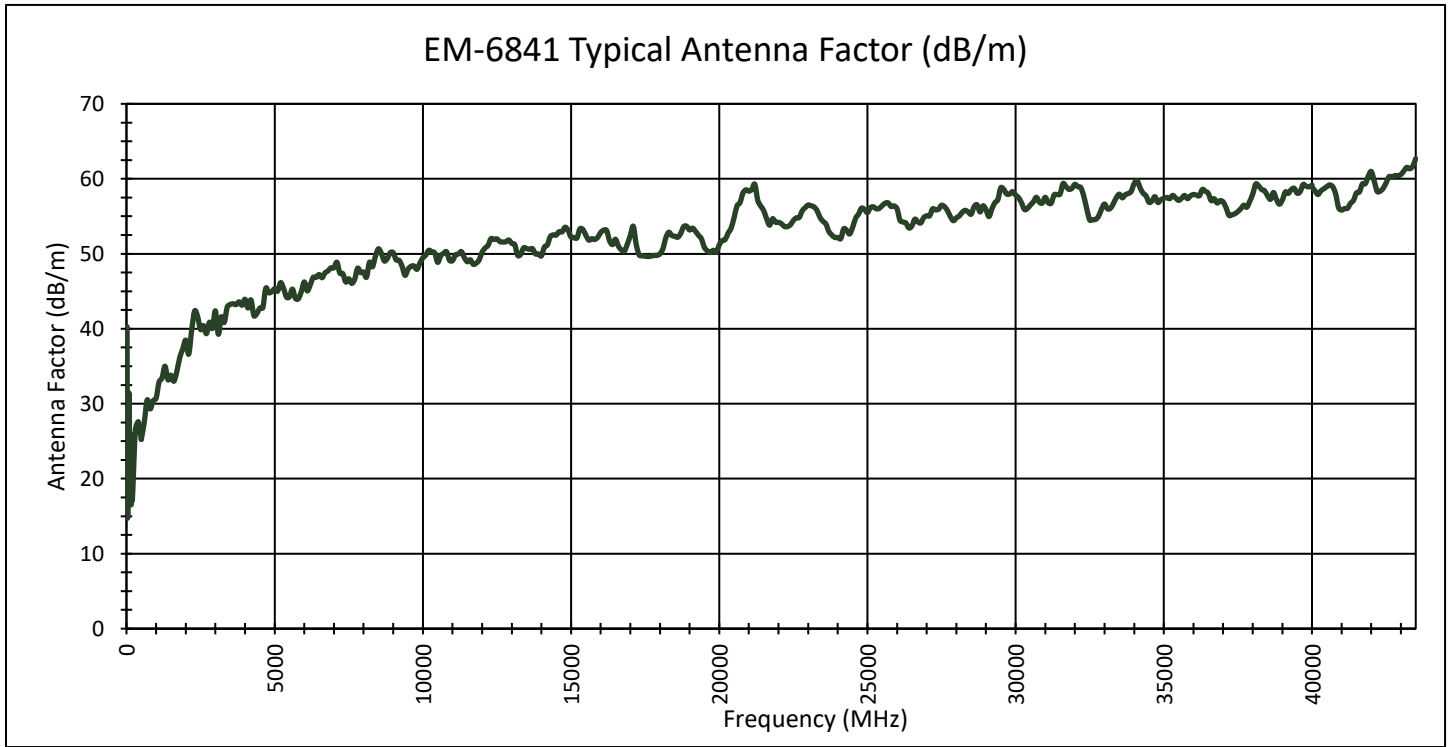


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EM-6841 | Antenna, Rugged, Ultra-Wideband, Passive, Omni-Directional



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EM-6964 | Antenna, Rugged, Hand-Held Directional



Description

The Electro-Metrics EM-6964 is an Ultra-Wideband Log Periodic antenna that comes in a rugged handheld package. The EM-6964 is the successor to the EM-6945, improving on the frequency range and durability of its predecessor. Optimized to provide directional sensitivity with an excellent front-to-back ratio, the EM-6964 is excellent at locating signal sources whether it be for SIGINT applications or EMC/Pre-Compliance testing.

MIL-STD-810H

This antenna has undergone and passed the Hot Temperature, Cold Temperature, Blowing Rain, Blowing Sand, and Shock and Vibration Environmental Tests, in accordance with MIL-STD-810H. Please contact Electro-Metrics for the detailed report.

Specifications

Electrical

Frequency Range: 200 MHz – 26 GHz

VSWR: Average 1.8:1

Impedance: 50Ω, Nominal

Gain: 6.7dBi Average 400MHz-18GHz

0-6dBi Typical 18GHz-26GHz

Connector: Type 'K' (200MHz-26GHz) (standard)

SMA (200MHz-26GHz)

Type 'N' (200MHz-18GHz)

Mechanical

Dimensions:

Overall Length: 52 cm (20.5")

Width: 32 cm (12.6")

Height: 4.45 cm (1.74") Handle Horizontal

16.5 cm (6.5") Handle Vertical

Weight: 0.97 kg (2.14 lbs.)

Mounting Options Available:

1/4 – 20 Tripod Mount Handle (included)

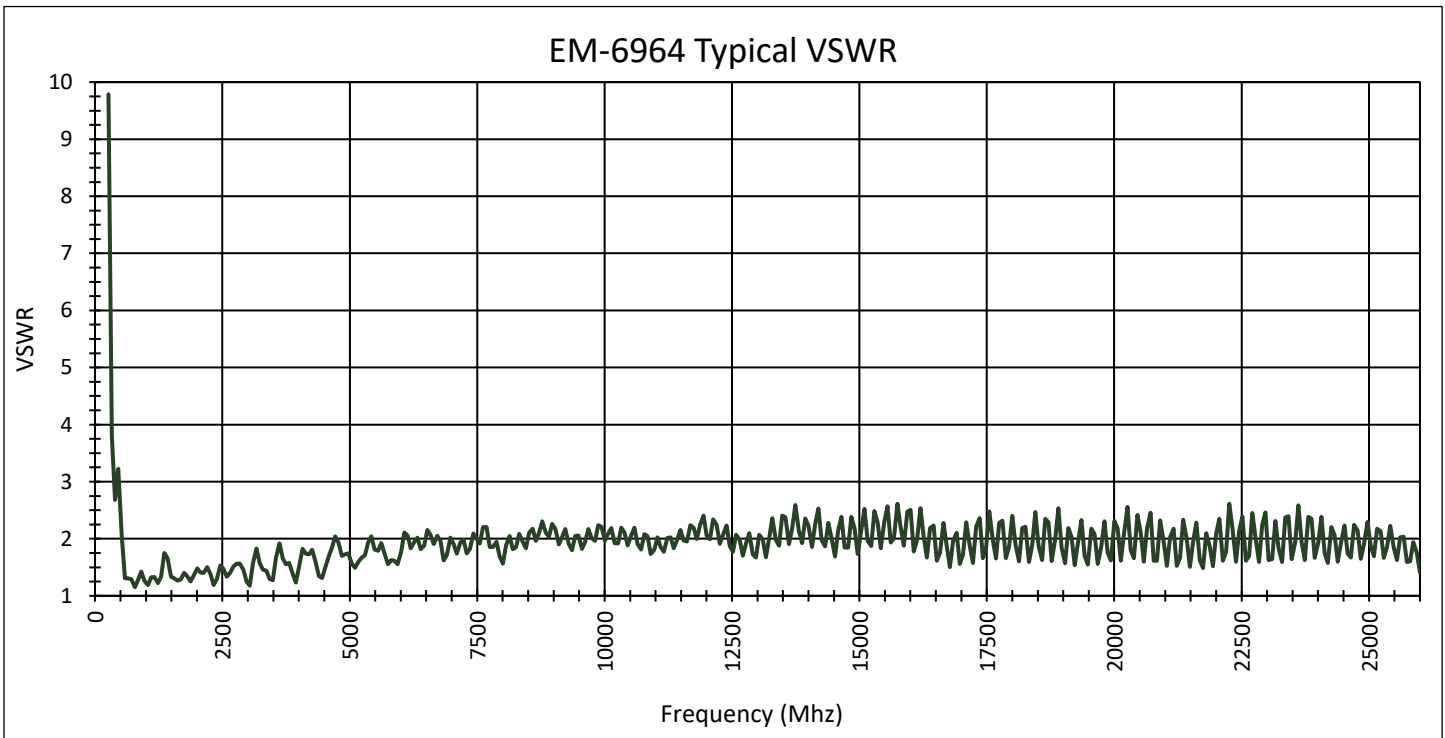
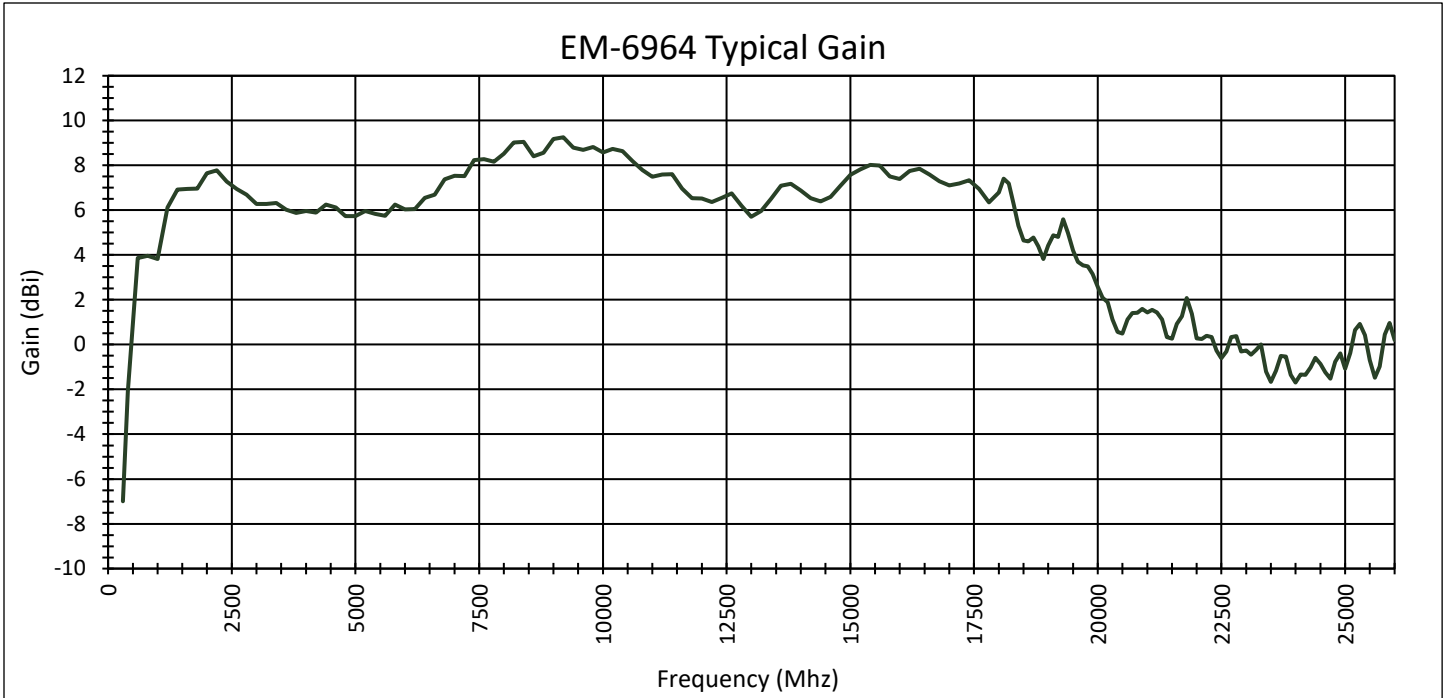
Color Options:

- Black (default)
- Custom colors available upon request

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EM-6964 | Antenna, Rugged, Hand-Held Directional

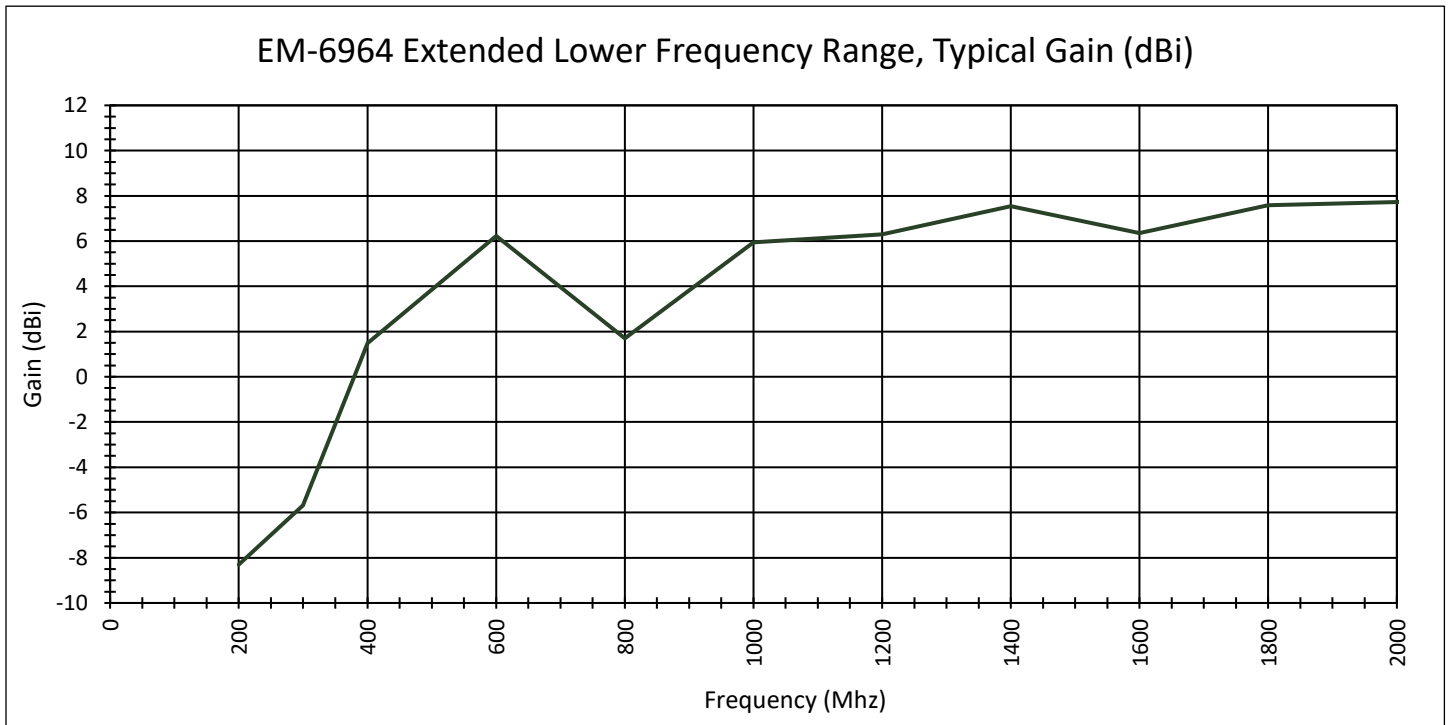
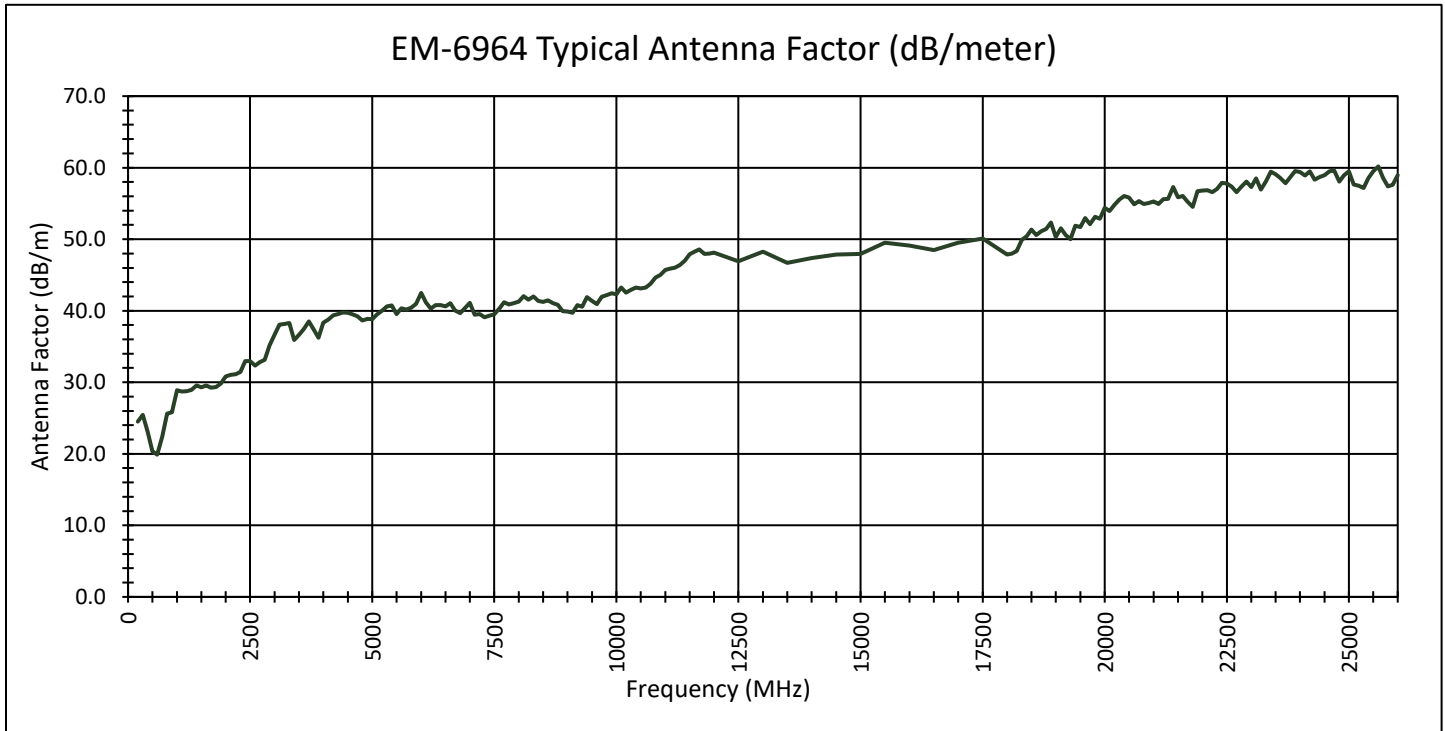


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EM-6964 | Antenna, Rugged, Hand-Held Directional



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EM-6902 | Antenna, Rugged, Magnetic Field, Hand-Held



Description

The Electro-Metrics EM-6902 Magnetic Field Antenna is designed to obtain magnetic field measurements from 100kHz to 300MHz. Calibrated for use in any 50Ω system as a receive only device, the EM-6902 is ideal for tracking a signal source through a wide range of frequencies.

MIL-STD-810H

This antenna has undergone and passed the Hot Temperature, Cold Temperature, Blowing Rain, Blowing Sand, and Shock and Vibration Environmental Tests, in accordance with MIL-STD-810H. Please contact Electro-Metrics for the detailed report.

Specifications

Electrical

Frequency Range: 100 kHz – 300 MHz

Impedance: Calibrated for use in a 50Ω system

Antenna Factor: 15 dB/m Average

> 0 dB/m Minimum (Typical)

30dB/m Maximum (Typical)

Connector: Type 'N' (female)

Mechanical

Dimensions:

Length: 23.5 cm (9.25")

Width: 10.8 cm (4.25")

Height: 15.9 cm (6.25") With Handle
4.2 cm (1.65") Without Handle

Weight: 0.68 kg (1.5 lbs.)

Mounting Options Available:

1/4 – 20 Tripod Mount Handle (included)

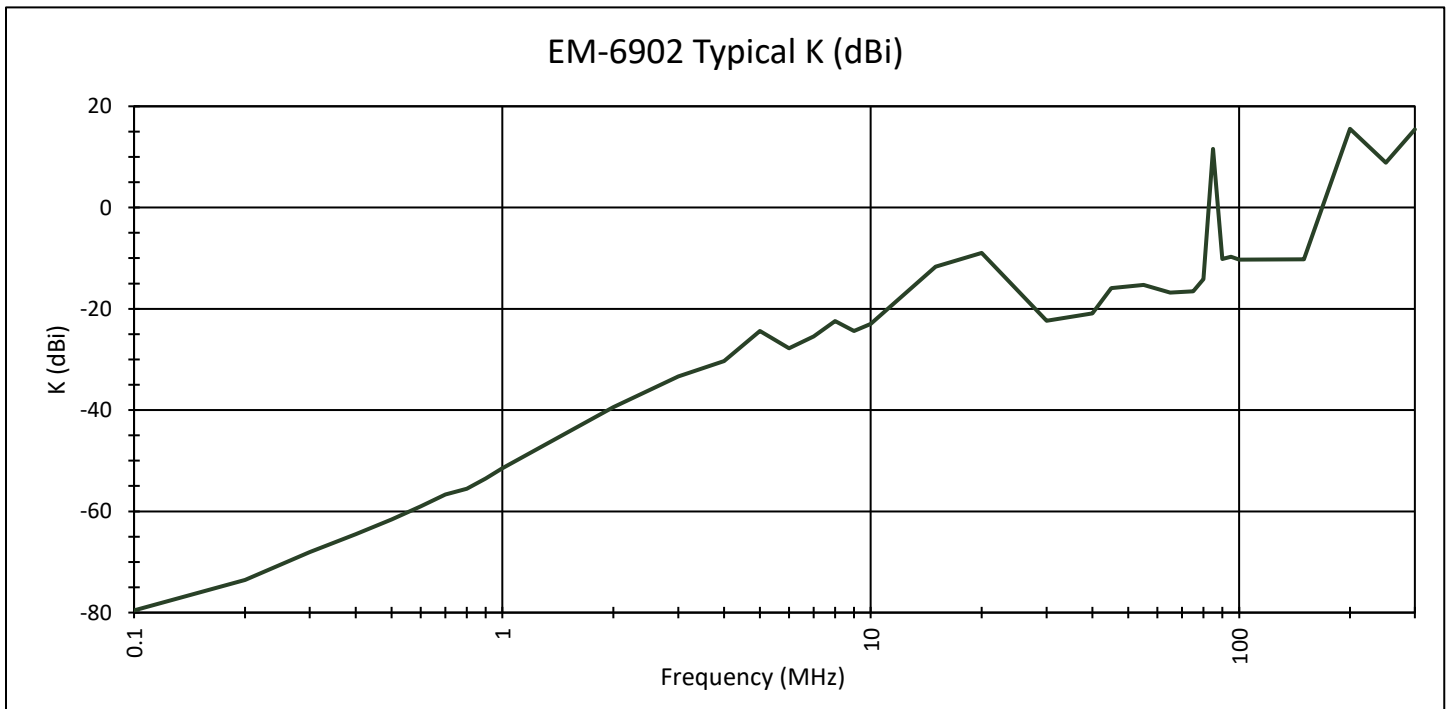
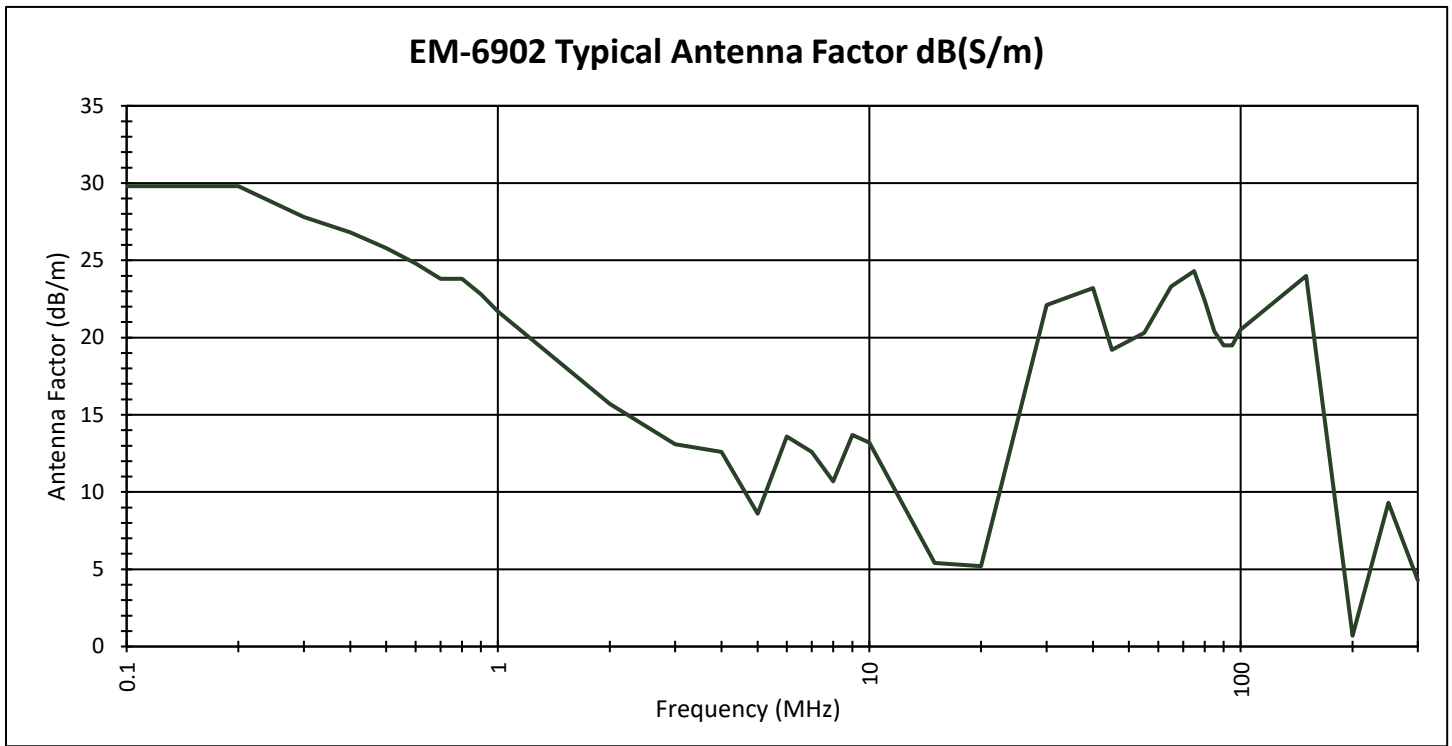
Color Options:

- Black (default)
- Custom colors available upon request

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EM-6902 | Antenna, Rugged, Magnetic Field, Hand-Held



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EM-6902 | Antenna, Rugged, Magnetic Field, Hand-Held

Frequency (MHz)	K	Antenna Factor
0.1	-79.57	29.8
0.2	-73.55	29.8
0.3	-68.03	27.8
0.4	-64.53	26.8
0.5	-61.59	25.8
0.6	-59.01	24.8
0.7	-56.67	23.8
0.8	-55.51	23.8
0.9	-53.49	22.8
1	-51.47	21.7
2	-39.45	15.7
3	-33.33	13.1
4	-30.33	12.6
5	-24.39	8.6
6	-27.81	13.6
7	-25.47	12.6
8	-22.41	10.7
9	-24.39	13.7
10	-22.97	13.2
15	-11.65	5.4
20	-8.95	5.2
30	-22.33	22.1
40	-20.93	23.2
45	-15.91	19.2
55	-15.27	20.3
65	-16.81	23.3
75	-16.57	24.3
80	-14.11	22.4
85	11.59	20.4
90	-10.19	19.5
95	-9.72	19.5
100	-10.27	20.5
150	-10.25	24
200	15.55	0.7
250	8.89	9.3
300	15.47	4.3

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EM-6906 | Antenna, Rugged, Magnetic Field, Hand-Held



Description

The Electro-Metrics EM-6906 Magnetic Field Antenna is designed to obtain magnetic field measurements from 5kHz to 20MHz. Calibrated for use in any 50Ω system as a receive only device, the EM-6906 is ideal for tracking a signal source through a wide range of frequencies.

MIL-STD-810H

This antenna has undergone and passed the Hot Temperature, Cold Temperature, Blowing Rain, Blowing Sand, and Shock and Vibration Environmental Tests, in accordance with MIL-STD-810H. Please contact Electro-Metrics for the detailed report.

Specifications

Electrical

Frequency Range: 5 kHz – 20 MHz

Impedance: Calibrated for use in a 50Ω system

Antenna Factor: 15 dB/m Average

> 0 dB/m Minimum (Typical)

60dB/m Maximum (Typical)

Connector: Type 'N' (female)

Mechanical

Dimensions:

Length: 24.1 cm (9.5")

Width: 24.1 cm (9.5")

Height: 15.9 cm (6.25") With Handle

4.3 cm (1.7") Without Handle

Weight: 1.46 kg (3.2lbs.)

Mounting Options Available:

1/4 – 20 Tripod Mount Handle (included)

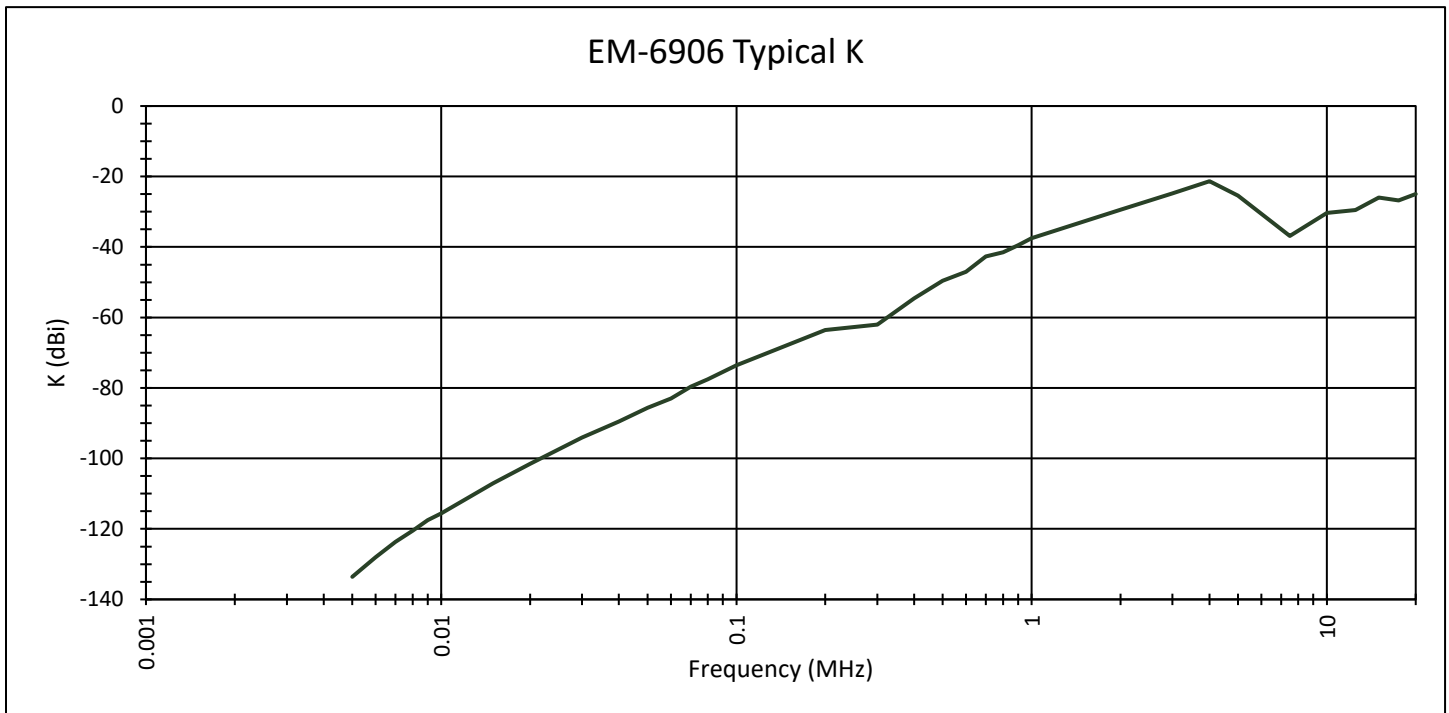
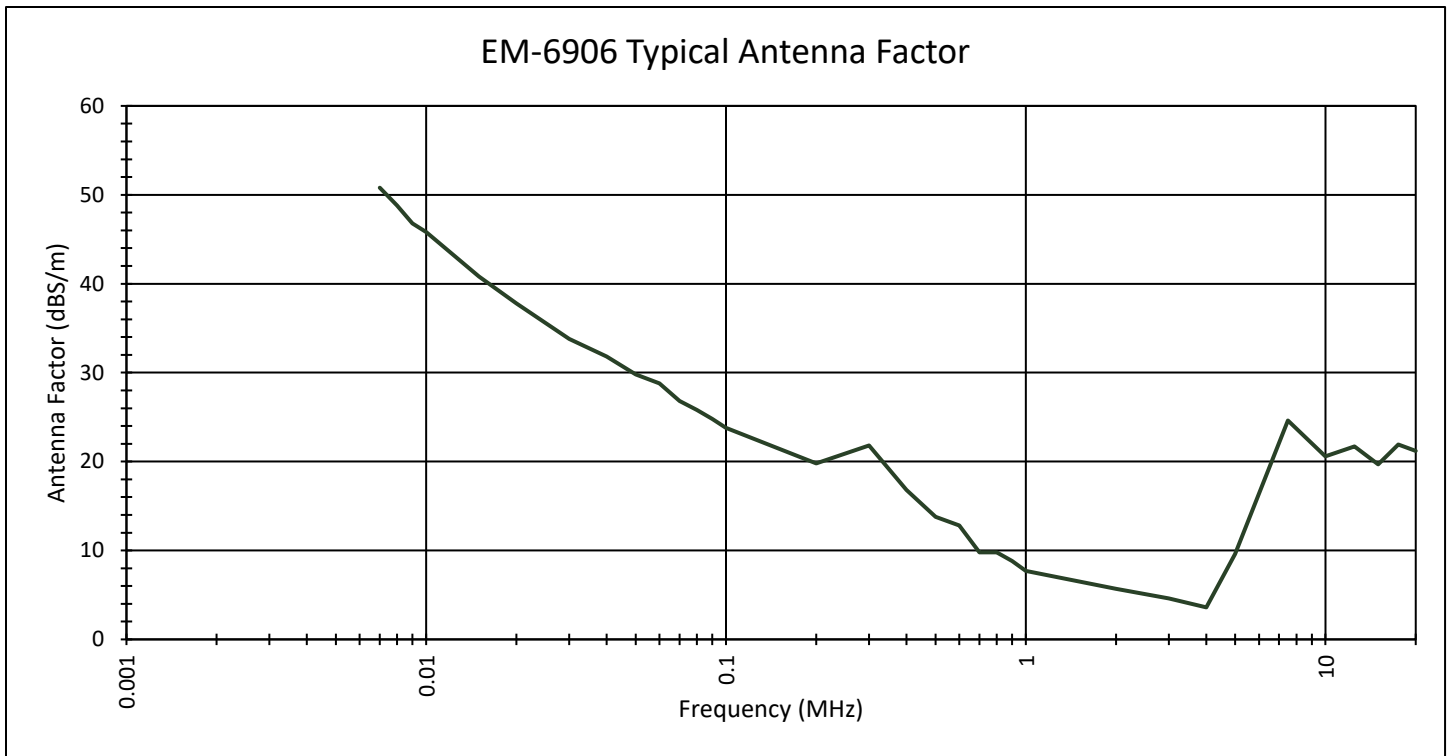
Color Options:

- Black (default)
- Custom colors available upon request

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EM-6906 | Antenna, Rugged, Magnetic Field, Hand-Held



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EM-6906 | Antenna, Rugged, Magnetic Field, Hand-Held

Frequency (MHz)	K	Antenna Factor
0.005	-133.595	57.8
0.006	-128.011	53.8
0.007	-123.672	50.8
0.008	-120.512	48.8
0.009	-117.489	46.8
0.01	-115.574	45.8
0.015	-107.052	40.8
0.02	-101.554	37.8
0.03	-94.0317	33.8
0.04	-89.533	31.8
0.05	-85.5948	29.8
0.06	-83.0111	28.8
0.07	-79.6722	26.8
0.08	-77.5124	25.8
0.09	-75.4893	24.8
0.1	-73.5742	23.8
0.2	-63.5536	19.8
0.3	-62.0317	21.8
0.4	-54.533	16.8
0.5	-49.5948	13.8
0.6	-47.0111	12.8
0.7	-42.6722	9.8
0.8	-41.5124	9.8
0.9	-39.4893	8.8
1	-37.4742	7.7
2	-29.4536	5.7
3	-24.8317	4.6
4	-21.333	3.6
5	-25.3948	9.6
7.5	-36.8729	24.6
10	-30.3742	20.6
12.5	-29.536	21.7
15	-25.9523	19.7
17.5	-26.8134	21.9
20	-24.9536	21.2
20	-24.9536	21.2

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EM-6844 | Antenna, Rugged, Long Wire



Description

The EM-6844 Long Wire Antenna offers excellent coverage across its wide frequency range of 1.6MHz to 30MHz. With its rugged and easily deployable package, the EM-6844 is ideal for IPMS and SIGINT for long-wave radio frequencies. The EM-6844 can be discreetly deployed and left outside in harsh conditions thanks to its MIL-STD-810H rating.

MIL-STD-810H

This antenna has undergone and passed the Hot Temperature, Cold Temperature, Blowing Rain, Blowing Sand, and Shock and Vibration Environmental Tests, in accordance with MIL-STD-810H. Please contact Electro-Metrics for the detailed report.

Specifications

Electrical

Frequency Range: 1.6 MHz – 30 MHz

Coverage: Short Range: 0 km – 150 km

Medium Range: 150 km – 800 km

Long Range: > 800 km

Impedance: 50Ω, Nominal

Power: 150 Watts Continuous, 400 Watts Peak

Connector: Type 'N' (female)

Mechanical

Wire Dimensions:

Length: 38.1m (60')

Diameter: 12 Gauge (0.08")

Spool Dimensions:

Length: 17.8 cm (7")

Diameter: 15.2 cm (6")

Weight: 1.96 kg (1.5 lbs.)

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