

## EM-6005 | Antenna Kit, 1 kHz – 43.5 GHz



### Description

The EM-6005 Antenna Kit provides all the antennas and accessories needed to cover the entire frequency spectrum from 1kHz to 43.5GHz while remaining compact and lightweight compared to other similar antenna kits.

The kit features:

- EM-6856 (20 MHz - 43.5 GHz) omni-directional antenna
- EM-6904-1 (1 kHz - 200 MHz) omni-directional antenna,
- EM-6945 (250 MHz - 25 GHz) Hand-Held directional Log Periodic antenna.

### Specifications

#### Electrical

<b>Kit Frequency Range:</b>	1 kHz – 43.5 GHz
<b>Impedance:</b>	50Ω, Nominal

#### Mechanical

<b>Length:</b>	19.5"
<b>Width:</b>	24"
<b>Height:</b>	14"
<b>Weight:</b>	30.9 lbs.
<b>Color Options:</b>	Black (default)
	Custom colors available upon request

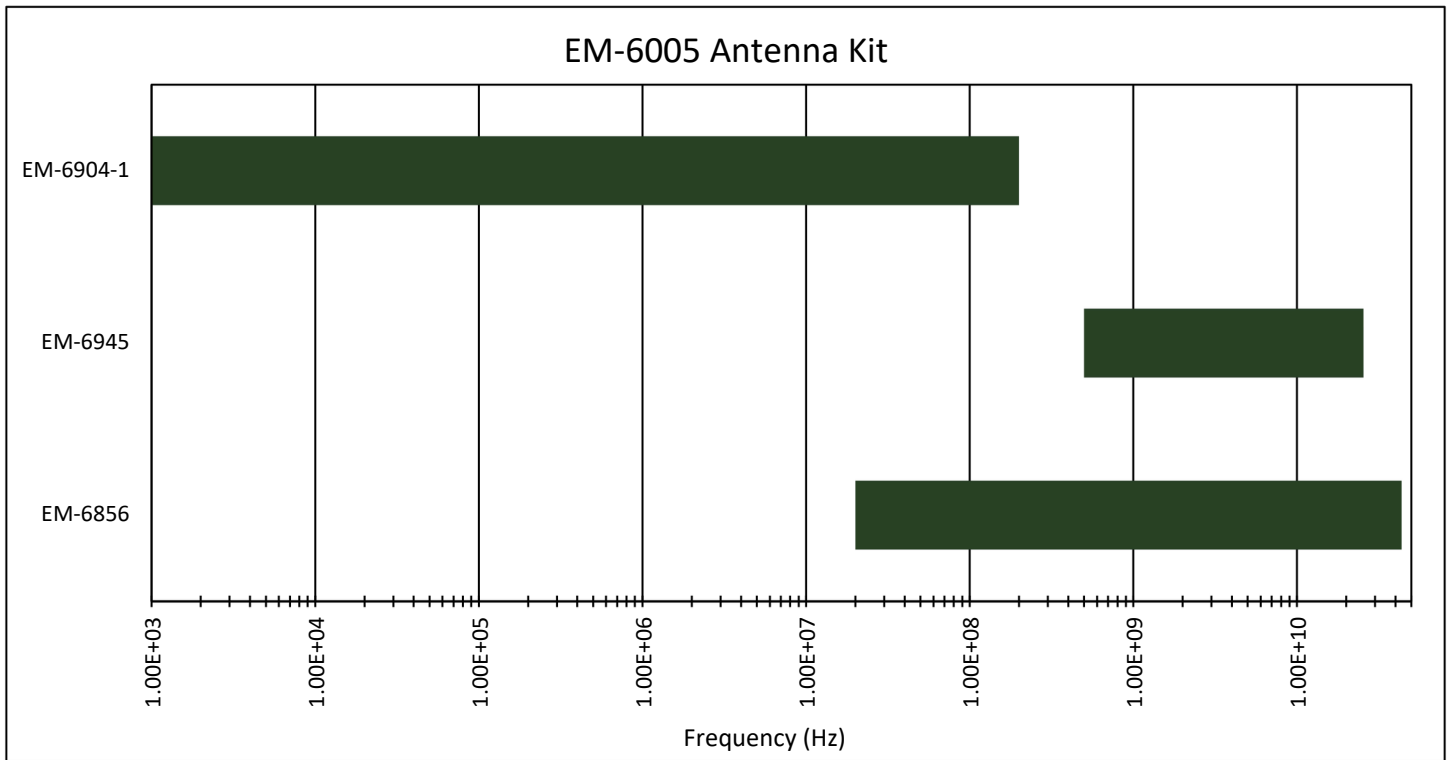
#### Kit Contents

<b>EM-6856</b>	Omni-Directional Antenna
<b>EM-6945</b>	Hand-Held Log Periodic Antenna
<b>EM-6904-1</b>	Whip Antenna
<b>EM-6133</b>	Tripod
<b>EM-1317</b>	(10ft) 2.92 mm Coax Cable (Qty 2)
<b>EM-7524</b>	2.92mm(f) to Type N(m) Adapter
<b>EM-7451</b>	BNC(f) to BNC(m) RT Angle Adapter

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



**EM-6005 | Antenna Kit, Rugged, 5 kHz – 43.5 GHz**



EM-6856



EM-6945



EM-6104-1

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## EM-6856 | Antenna, Ultra-Wideband, Passive, Omni-Directional



### Description

The Electro-Metrics EM-6856 is an Ultra- Wideband Passive Antenna with Omni- Directional radiation patterns covering the entire frequency range of 20MHz-43.5GHz.

As the successor to the EM-6857, the EM-6856 features a size reduction of 38% and weight reduction of 36% over its predecessor while maintaining a nominal gain of > 2dBi across 90% of its operational frequency range. Environmentally hardened with a rugged build and stable performance, this antenna is excellent for SIGINT and related applications.

### Specifications

#### Electrical

<b>Frequency Range:</b>	20 MHz – 43.5 GHz
<b>Polarization:</b>	Linear, Vertical
<b>VSWR:</b>	Average 2:1 above 400 MHz
<b>3dB Beamwidth:</b>	360° Azimuth (Omni-Directional) 45° Average Elevation (70° - 30° Typical)
<b>Impedance:</b>	50Ω, Nominal
<b>Gain:</b>	150 MHz-40 GHz Nominal 2 dBi @ 100 MHz Nominal -12 dBi @ 20 MHz Nominal -44 dBi
<b>Connector:</b>	Type 'K' ( <b>EM-6856</b>   20 MHz-43.5 GHz) SMA ( <b>EM-6856-2</b>   20 MHz-26 GHz) Type 'N' ( <b>EM-6856-1</b>   20 MHz-18 GHz)

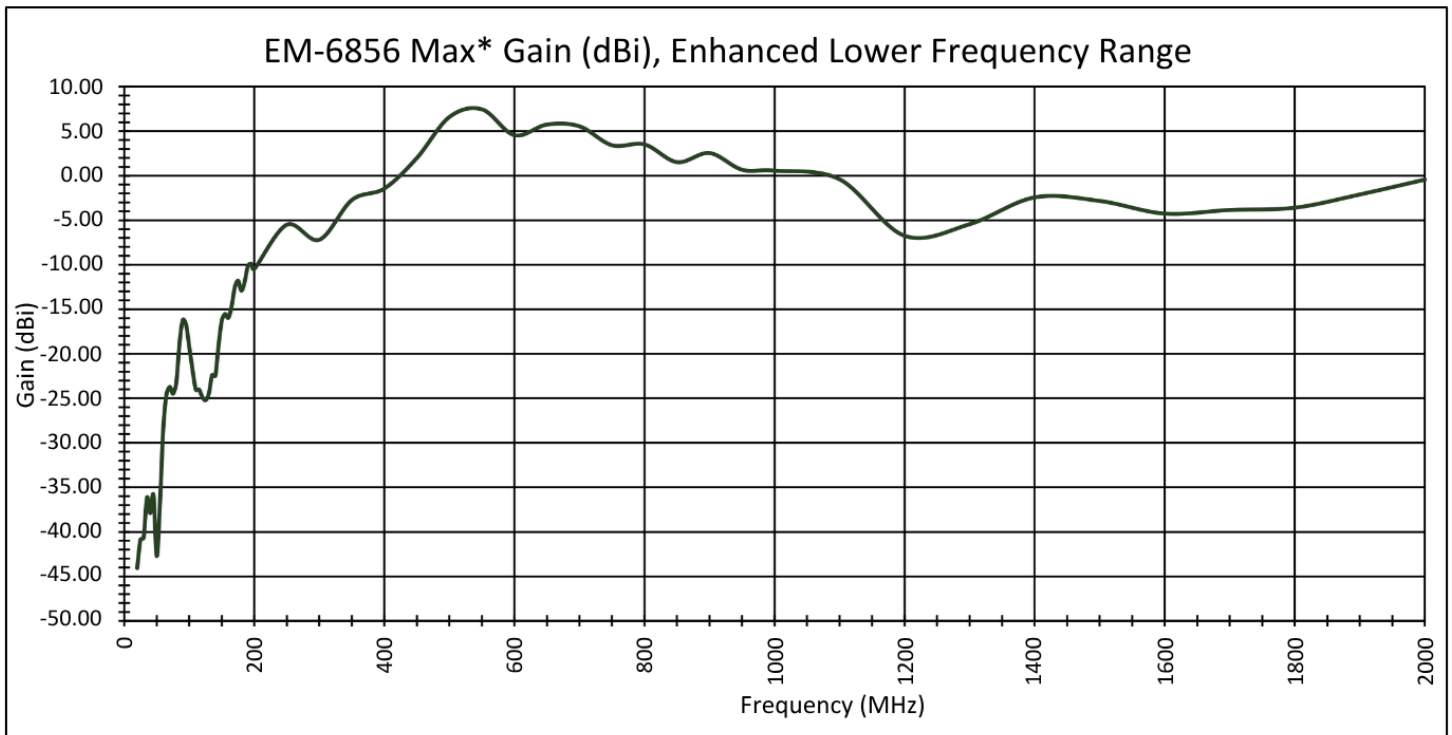
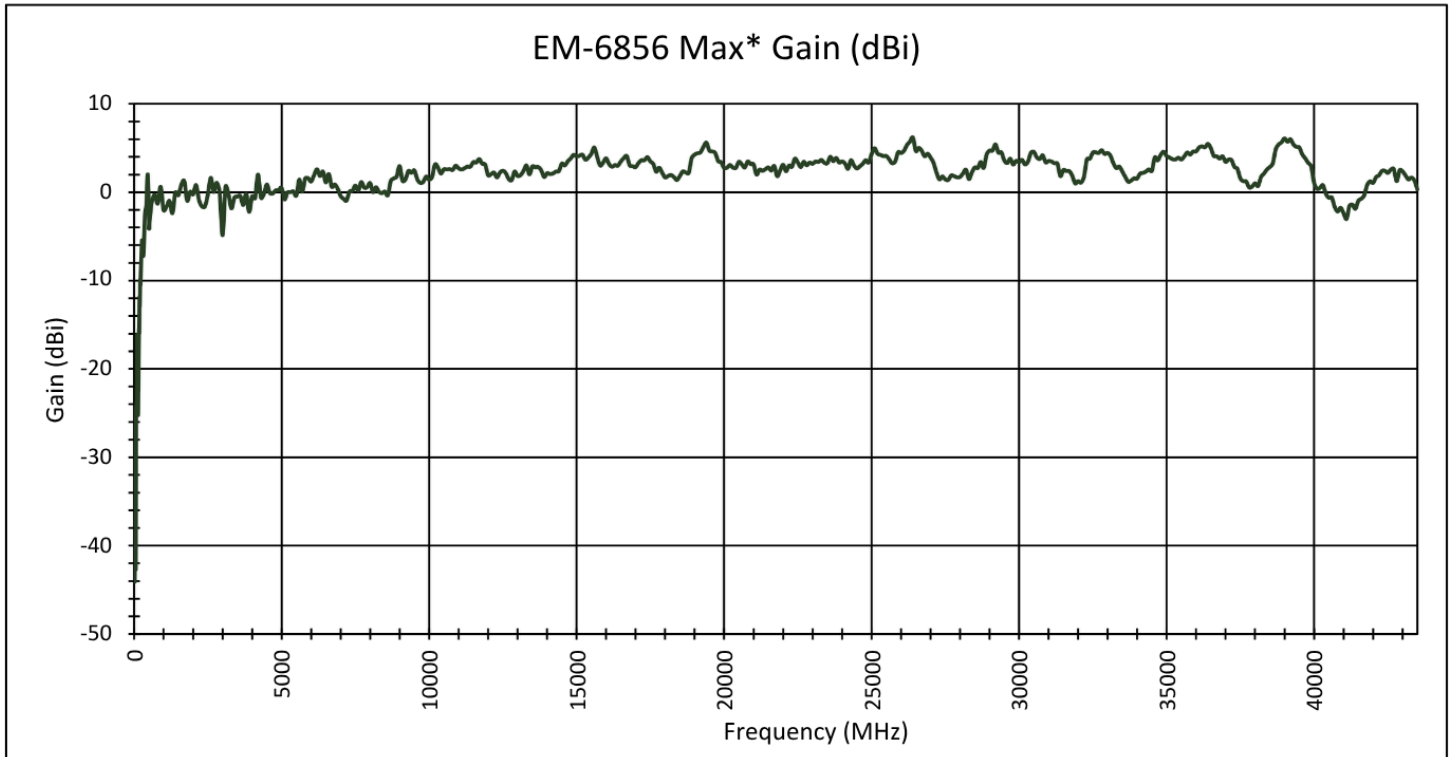
#### Mechanical

<b>Overall Length:</b>	29 cm (11")
<b>Diameter:</b>	11.5 cm (4.5")
<b>Weight:</b>	0.86 kg (1.9 lbs.)
<b>Mounting Options Available:</b>	EM-1607 Tripod Mount (included) EM-1608 Right Angle Wall Mount EM-1108 Rugged Roof Rack Mount EM-1109 Pole Mount
<b>Color Options:</b>	<ul style="list-style-type: none"> <li>Black (default)</li> <li>Custom colors available upon request</li> </ul>

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**EM-6856 | Antenna, Ultra-Wideband, Passive, Omni-Directional**

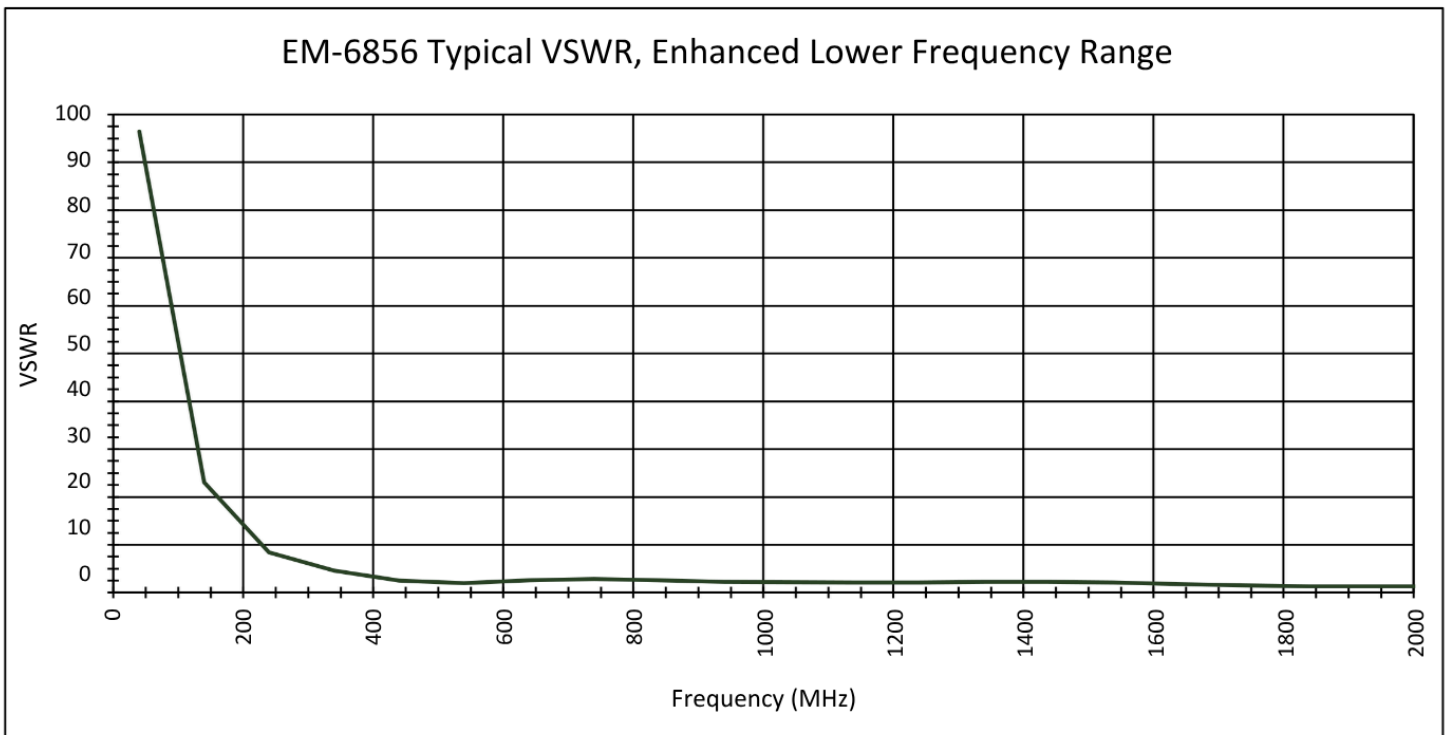
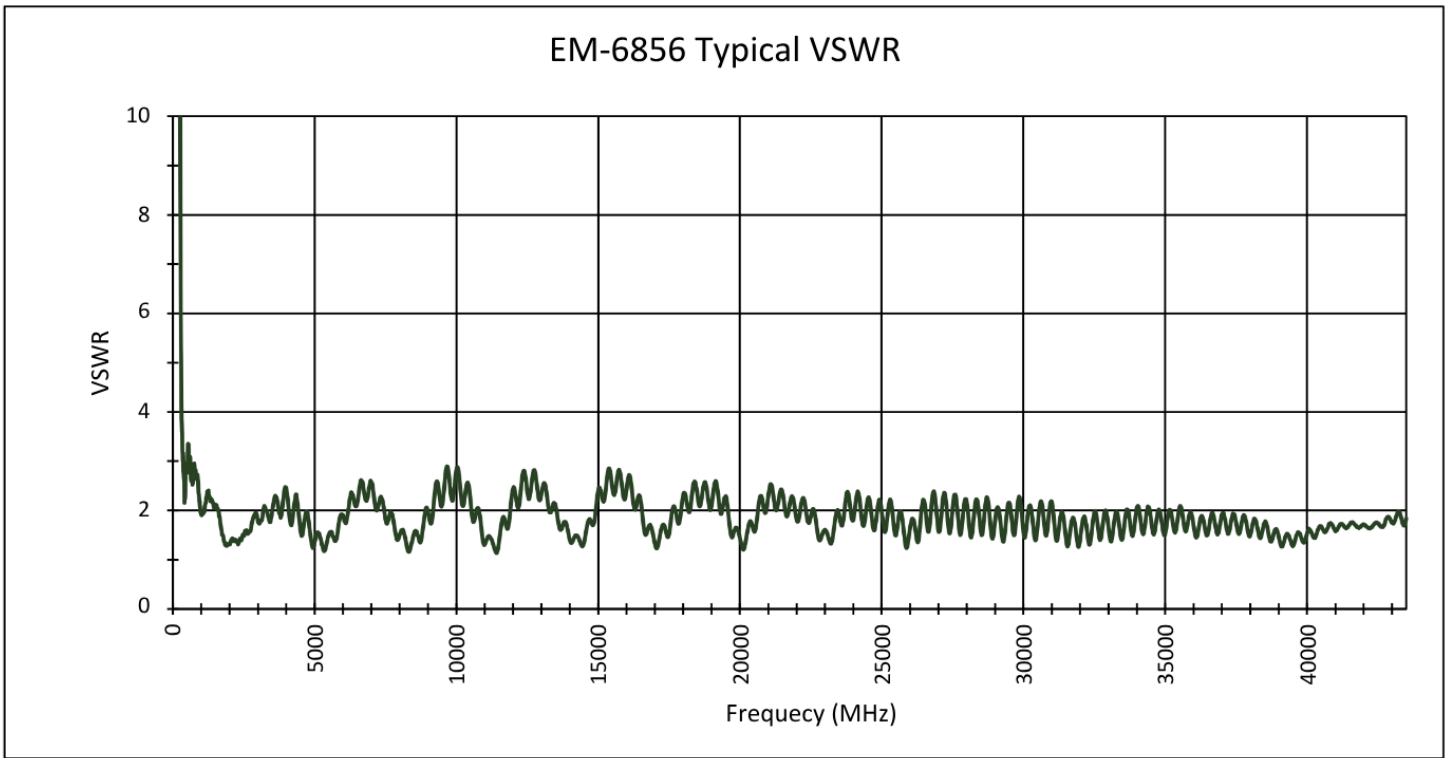


\*Maximum Gain determined from scans at all radiation angles and elevations. Data shown is typical, not guaranteed.

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**EM-6856 | Antenna, Ultra-Wideband, Passive, Omni-Directional**

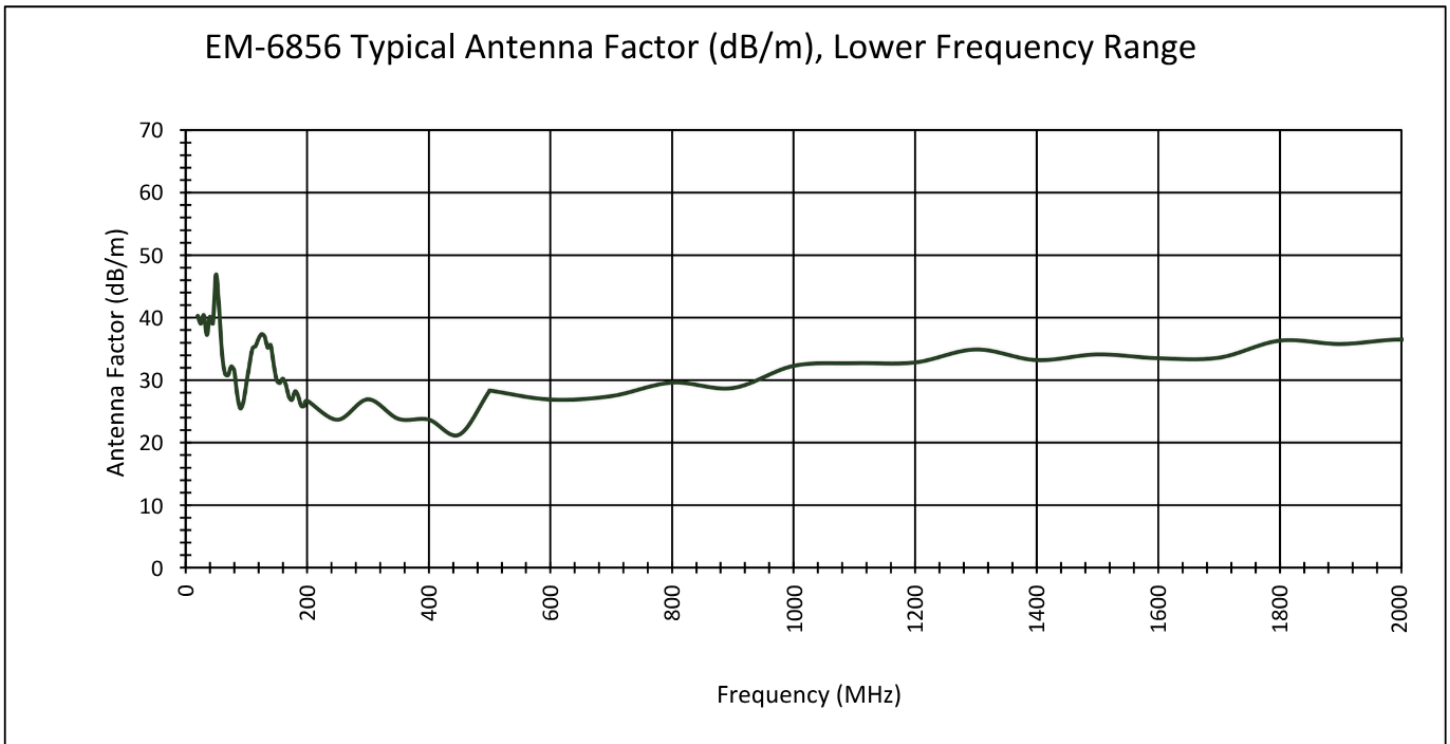
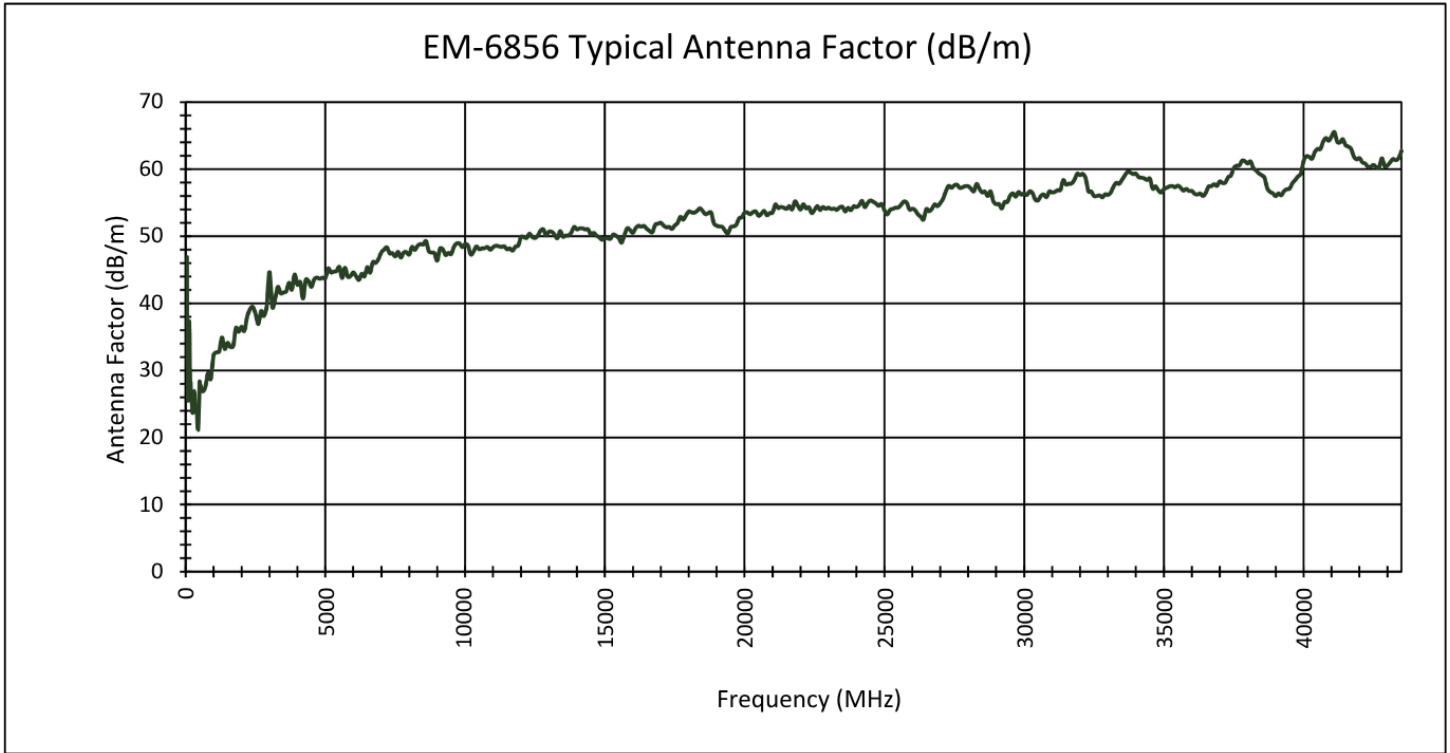


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**EM-6856 | Antenna, Ultra-Wideband, Passive, Omni-Directional**



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## EM-6945 | Antenna, Hand-Held Directional



### Description

The EM-6945 ‘Vector’ is an Ultra-Wideband Log Periodic antenna that comes in a small, easily deployable handheld package. The EM-6945 has been optimized for peak efficiency across its entire frequency range while maintaining stable directional radiation patterns. It offers a consistent 5-8 dBi of gain across the majority of its frequency range. The Vector is the ideal hand-held device for locating the origin of transmitting equipment.

Perfect for SIGINT and multi-band communications applications or any other application where a small, rugged, high-performance passive antenna is required.

A detented, pivoting handle with a built-in ¼-20 tripod mount allows for immediate polarity changes without any additional setup required.

### Specifications

#### Electrical

<b>Frequency Range:</b>	500 MHz – 25 GHz
<b>VSWR:</b>	1.7:1 Average
<b>Impedance:</b>	50Ω, Nominal
<b>Gain:</b>	600 MHz-16 GHz > 0 dBi Nominal 16 GHz-25 GHz 0-6 dBi Nominal
<b>Connector:</b>	Type ‘K’ (500 MHz-25 GHz) std SMA (500 MHz-25 GHz) Type ‘N’ (500 MHz-18 GHz)

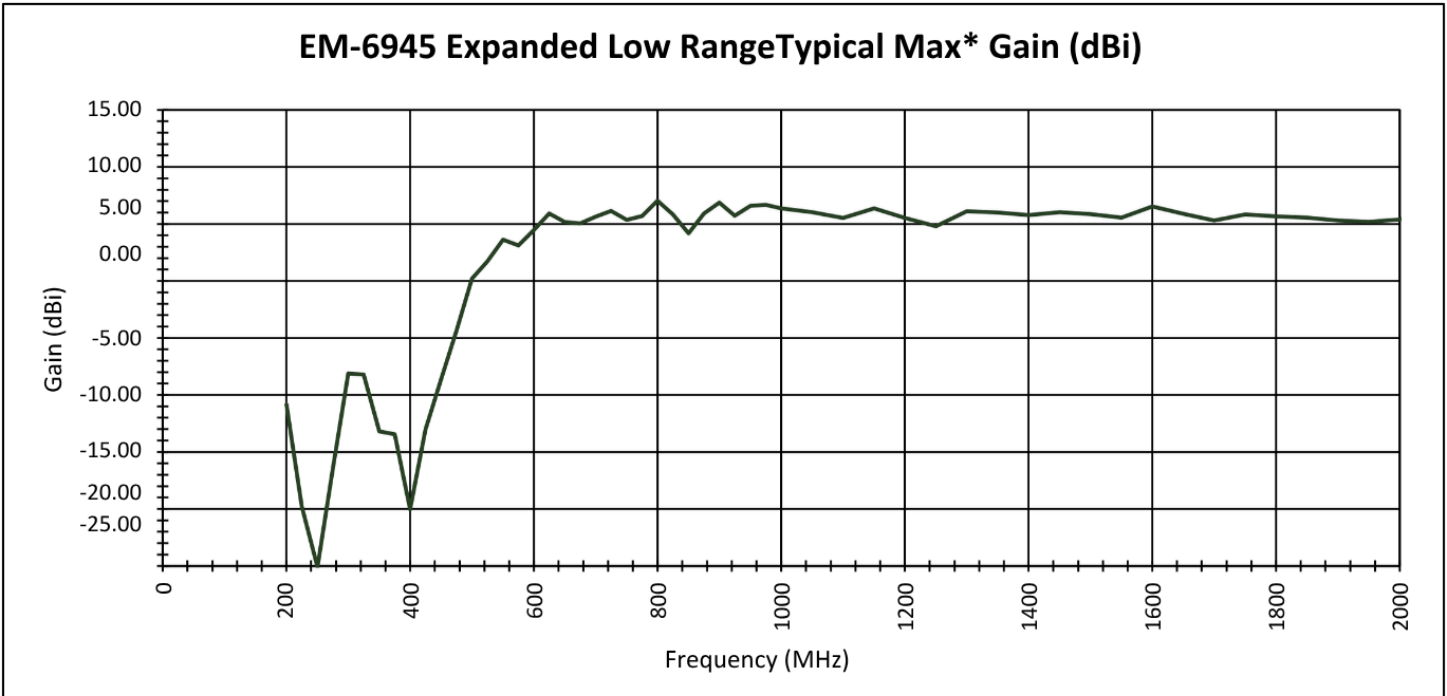
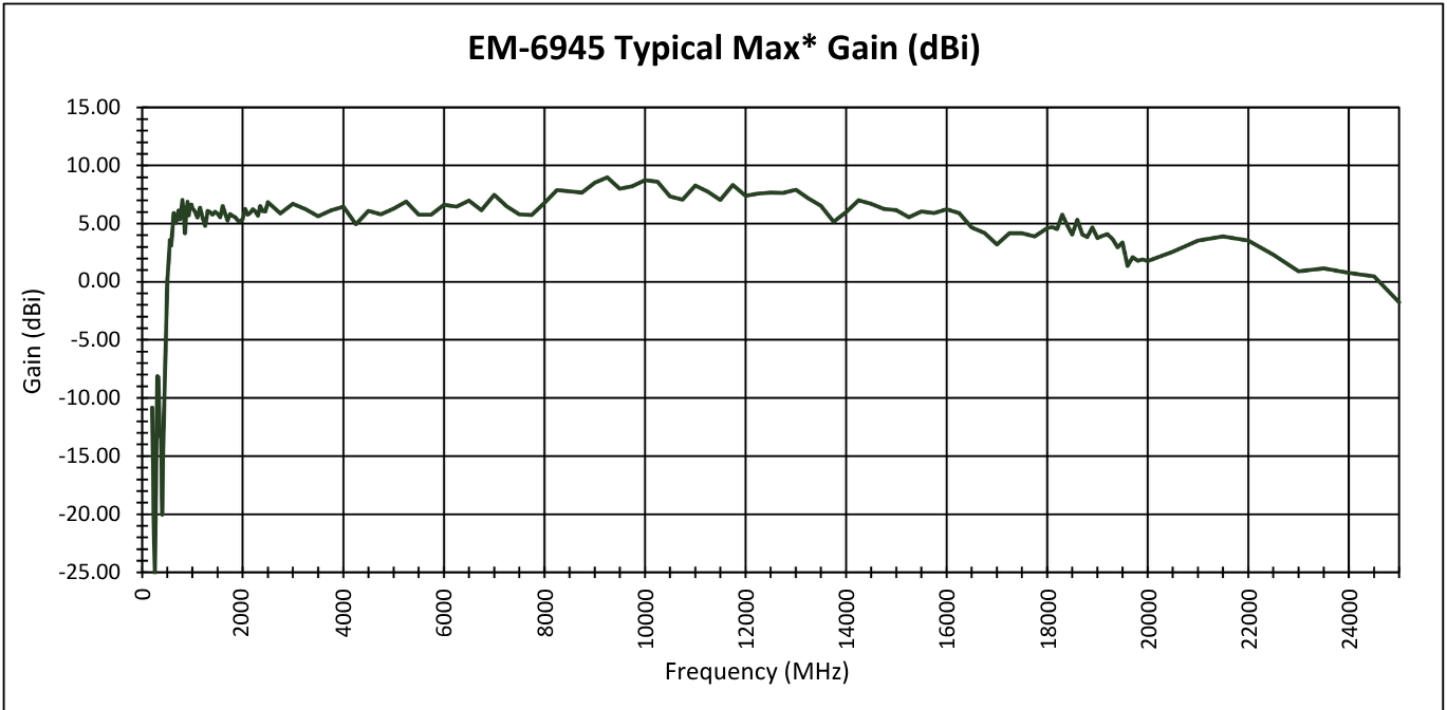
#### Mechanical

<b>Dimensions:</b>	<b>Overall Length:</b> 39.4 cm (15.5") <b>Width:</b> 21.6 cm (8.5") <b>Height (with Handle):</b> 15.25 cm (6")
<b>Weight:</b>	0.68 kg (1.5 lbs.)
<b>Mounting Options:</b>	1/4 – 20 Tripod Mount Handle (included) EM-6943 (EM-6945 without handle)
<b>Color Options:</b>	Black (default) Custom colors available upon request

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**EM-6945 | Antenna, Hand-Held Directional**

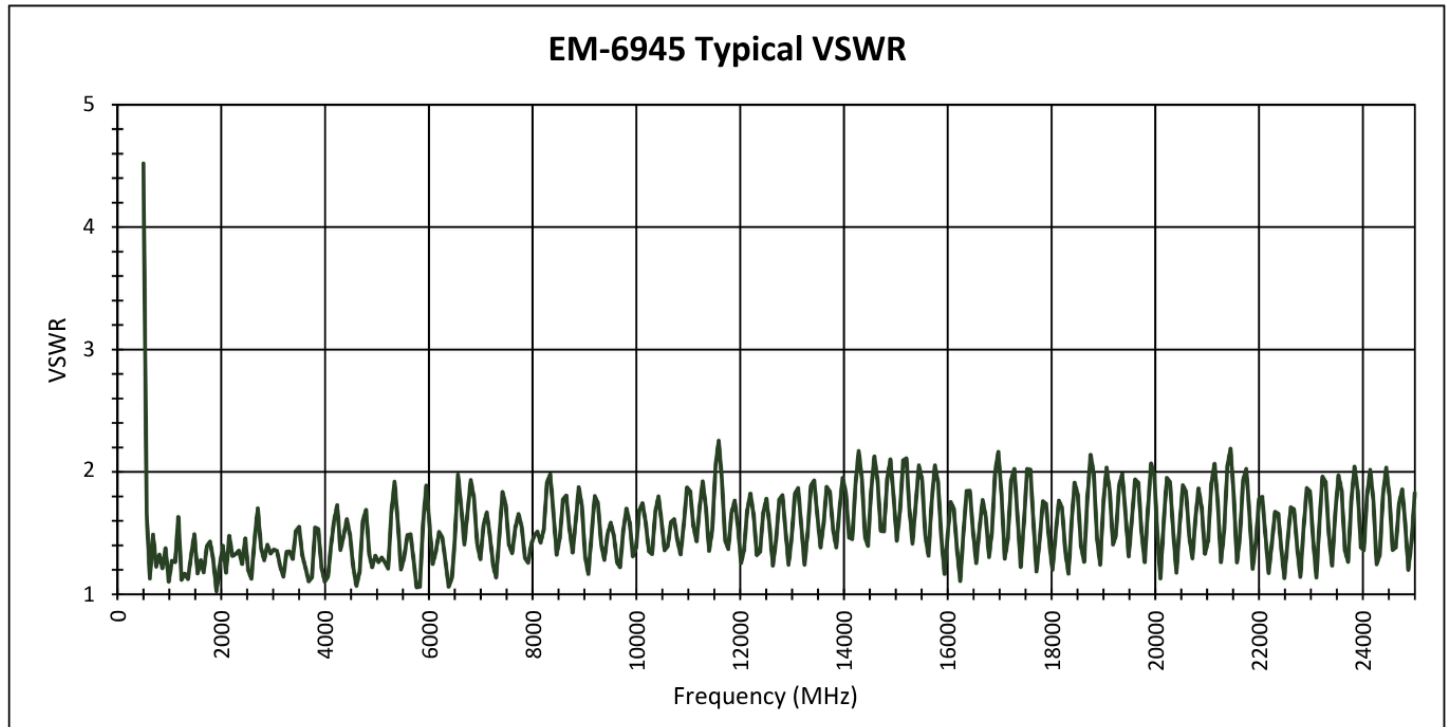
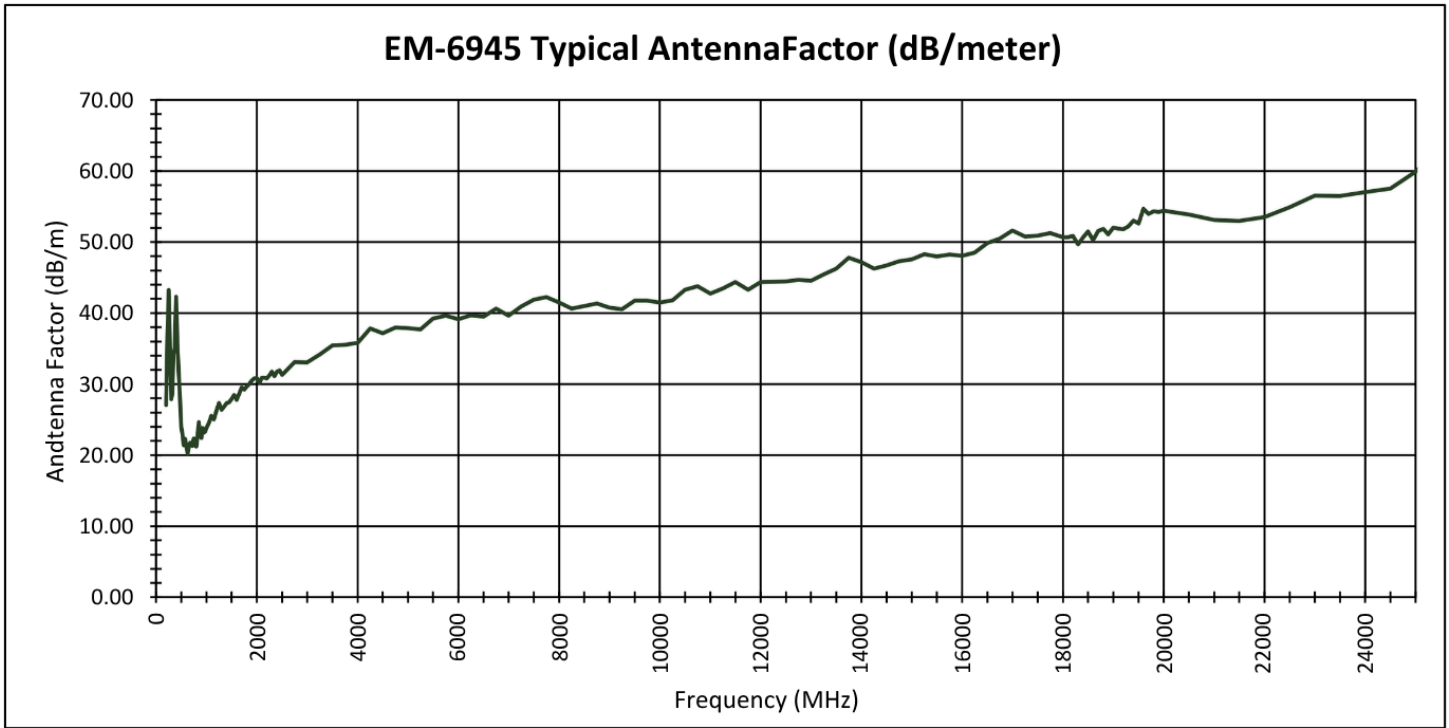


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### EM-6945 | Antenna, Hand-Held Directional



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## EM-6904-1 | Antenna, Whip, Omni-Directional



### Description

The EM-6904-1 Omni-Directional Whip antenna is used to provide E-field signal reception for frequencies as low as 1 kHz. The solid base and rubberized whip are available on a 60-inch collapsible rod, combining for a rugged, effective means to detect signals in the HF range. The EM-6904-1 is an uncalibrated antenna.

### Specifications

#### Electrical

<b>Frequency Range:</b>	1 kHz – 200 MHz
<b>Gain With “Rubber Ducky” Element:</b>	Uncalibrated
<b>Gain With 60” Collapsible Rod:</b>	Above 50 MHz: > -10 dBi Nominal 30 MHz – 50 MHz > -20 dBi Nominal Above 2.5 MHz > -60 dBi Nominal
<b>Beamwidth:</b>	360° Azimuth (Omni-Directional)
<b>Impedance:</b>	50Ω, Nominal
<b>Connector:</b>	BNC (female) on 18” Coaxial Cable

#### Mechanical

<b>Base:</b>	8.89 cm (3.5")
<b>Rod (at Connector):</b>	1.91 cm (0.75")
<b>Height:</b>	<b>Base:</b> 4.76 cm (1.86") <b>Rod (Collapsed):</b> 19.89 cm (7.75") <b>Rod (Extended):</b> 153.7 cm (60.5")
<b>Weight:</b>	0.46 kg (1.01 lbs.)

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