

## Features

**Reference noise source** - For site verification

**Wide frequency band**

**Conducted and radiated noise**

**Small Size** - To test small enclosures

**Battery Powered** - For accuracy and convenience

**Two Year Warranty**



## Description

The CG-500 Series Comb Generators are reference signal sources providing frequency harmonics at preset frequency intervals. The output signal of the Comb Generator is used as a conducted or a radiated signal source.

As a conducted signal source, the output is available directly from the connector. Two antennas are supplied with the Comb Generator for generating radiated reference signals.

The Comb Generator is powered by a rechargeable internal battery. Battery power eliminates any possible measurement variations that can be caused by an external power cable connection. When fully charged, the battery allows continuous operation for up to 18 hours. Internal control and monitoring circuits provide indications of valid output signals.

A battery charger is included with the Comb Generator. The Comb Generator and accessories are shipped in a wooden storage box.

## Application

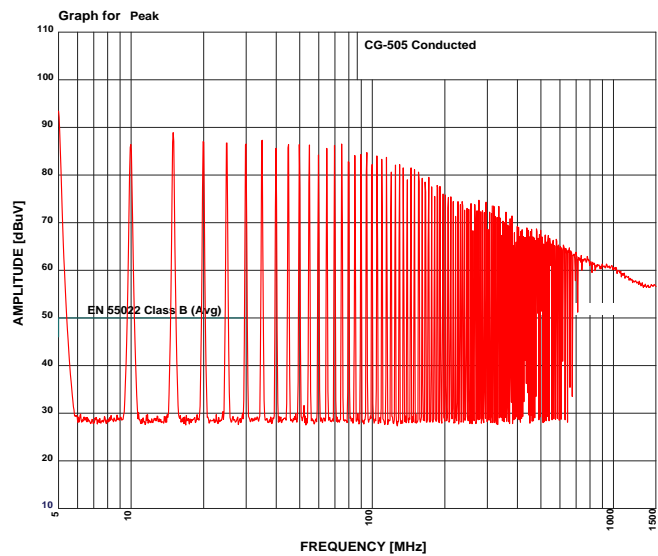
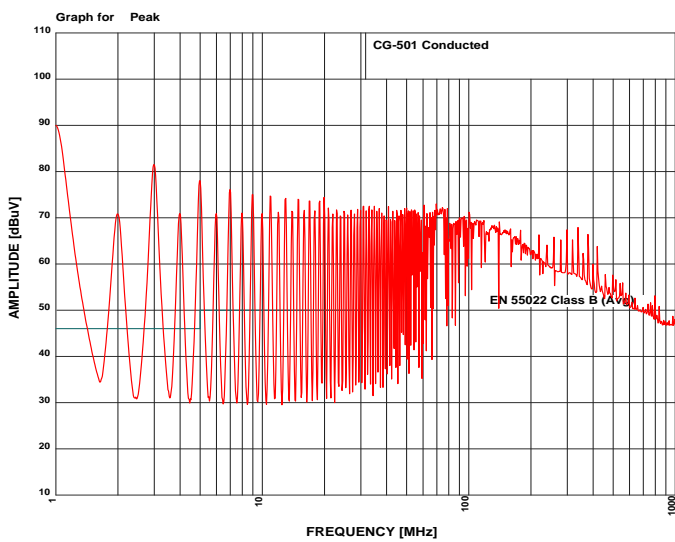
The most important application of a Comb Generator, is trouble shooting Open Area Test Sites (OATS). An OATS must be completely calibrated before it is put into service. When the validity of the test data taken at an OATS is in doubt after it is put into service, it is not always practical to perform complete site calibration. The Comb Generator is a quick calibration tool that can help identify potential problems with the site. For instance, emission measurements taken from a product at two different test sites can sometimes vary. It is very difficult to determine the cause of the variation. Using the same test setup, measurement can be taken with a Comb Generator in place of the product at both sites. The data can be compared to determine if variation is due to the product or the test site.

Other uses of the Comb Generator include evaluating shielding effectiveness and /or resonance performance of enclosures for electronic equipment. Shielding performance of an enclosure can be evaluated simply by comparing the noise with and without an enclosure. The Comb Generator can also be used for production evaluation of components, such as cables and filters.

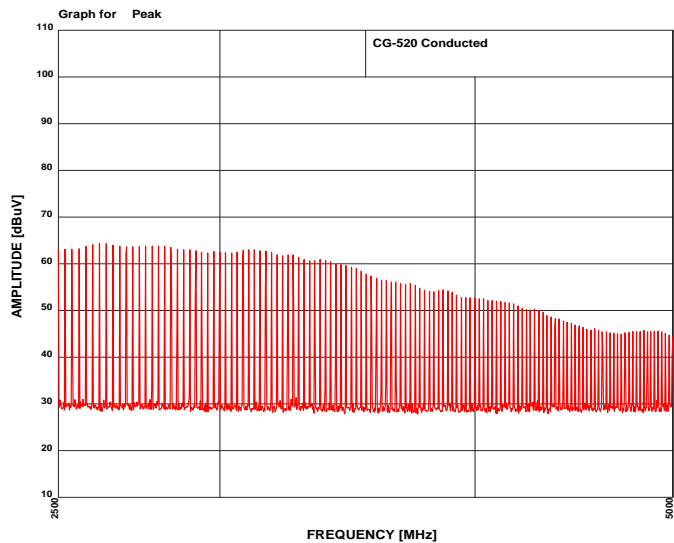
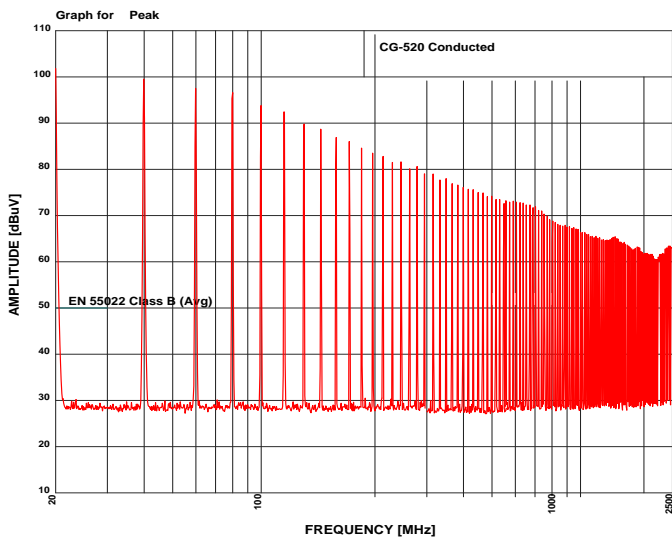
# Specifications

Model	Frequency Range	Step Size	Connector	Power	Frequency Range MHz	Frequency Range (MHz)	Dimensions w/o antenna	Weight
	MHz	MHz	Type	Battery	12 inch Antenna	3 inch Antenna	inches L x W x D	lb.
CG-501	1-1000	1	BNC (f)	4.8 V Nicad	1-540	540-1000	3.3 x 3.3 x 2.2	1
CG-505	5-1500	5	BNC (f)	4.8 V Nicad	5-540	540-1500	3.3 x 3.3 x 2.2	1
CG-515	1-1500	1 or 5	BNC (f)	4.8 V Nicad	1-540	540-1500	3.3 x 3.3 x 2.2	1
CG-520	20-4500	20	BNC (f)	4.8 V Nicad	20-540	540-4500	3.3 x 3.3 x 2.2	1

## Typical conducted output (CG-501, CG-505)



## Typical conducted output (CG-520)



All values are typical values unless specified.  
All specifications are subject to change without notice.