



EMC Instruments corporation

# DATA SHEET

# CG 50LR10100R

## Comb Generator

4 in 1 Comb Generator

Conducted Emission:

- Frequency Range : 50kHz/500kHz ~ 108MHz for DC LISN

Radiated Emission:

- Frequency : 50kHz/500kHz ~30MHz for RE with Monopole Antenna
- Frequency : 10MHz/100MHz ~1G for RE
- Frequency : 100MHz ~6G for RE



Sales Partner:



**ABSOLUTE EMC** Llc.  
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absolute-emc.com  
Phone:703-774-7505  
info@absolute-emc.com

www.emci.com.tw



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## Comb Generator

### CG 50LR10100R

### Feature

- Frequency Range :  
50kHz/500kHz ~ 108MHz for LISN &  
RE 10MHz ~6GHz for RE
- Frequency Step :  
50kHz/500kHz step switchable for CE  
& RE with Monopole Antenna  
10MHz/100MHz step switchable for RE

### Description

The CG 50LR10100R Comb Generators are reference signal sources for testing Line Impedance Stabilization Networks (LISNs) and 30MHz-6GHz radiated emission measurements in an EMI Chamber.

The CG50LR10100R output has the harmonics of the fundamental frequency specified by the step size. There are two bands included: from 50kHz ~ 108MHz with step sizes of 50kHz / 500kHz switchable, and 10MHz ~ 6GHz with step sizes of 10 MHz and 100MHz switchable. This allows checks and investigations on conducted measurement systems to be made using a LISN, and RE measurements to be made in a EMI Chamber.

When fully charged, the battery allows continuous operation of up to 16 hours. The Comb Generator includes a battery charger, USB cable, and accessories.

They are shipped in a wooden storage box.

### Application

The main application of Comb Generator is to quickly verify conducted & radiated emissions test setups. The most important application is troubleshooting conducted measurements using a LISN and EMI radiated emissions in a chamber.

With the Comb Generator, the test engineer will be able to quickly perform a verification of the Conducted & Radiated test setup more frequently to assure accurate test results.

Other possible applications of the CG50LR10100R Comb Generator could include production evaluation of components such as cable shields and filters & Chamber validation according to CISPR16 & CISPR25 automotive standards.





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Comb Generator

**CG 50LR10100R**

## Specification

Frequency Range	CE: 50kHz/500kHz ~ 108MHz for DC LISN (CISPR16 & CISPR25) RE: 50kHz/500kHz ~ 30MHz with Monopole Antenna(CISPR25) RE: 30MHz ~ 1GHz (10MHz step) RE: 1GHz ~ 6GHz (100MHz step)
Frequency Step	50kHz/500kHz/ step switchable for CE & RE with Monopole Antenna 10/100MHz/ step switchable for RE
Charging Time	8-10 Hours
Usage time	16 Hours
Size	120mm(W)*82mm(D)*85mm(H)
Net Weight	1.1Kg

## Application



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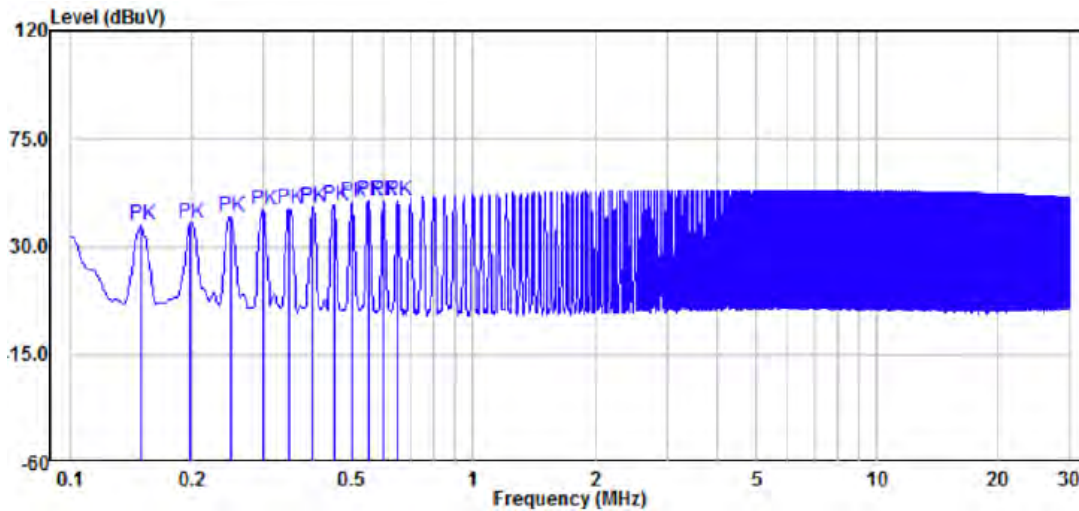
Comb Generator

**CG 50LR10100R**

## TEST REPORT

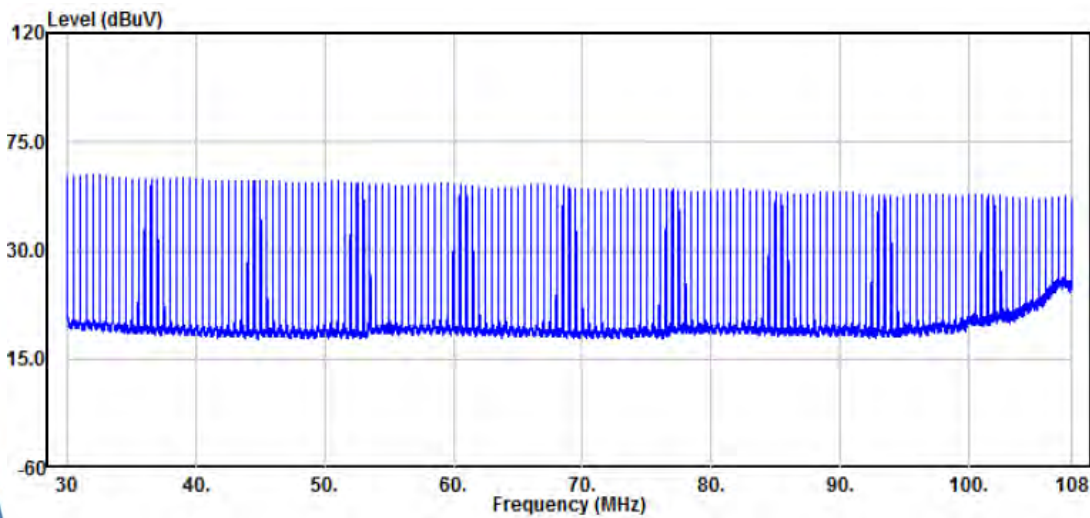
CE : 50kHz ~ 30MHz

50kHz/ step RBW=9kHz



CE : 30MHz ~ 108MHz

500kHz/ step RBW=9kHz



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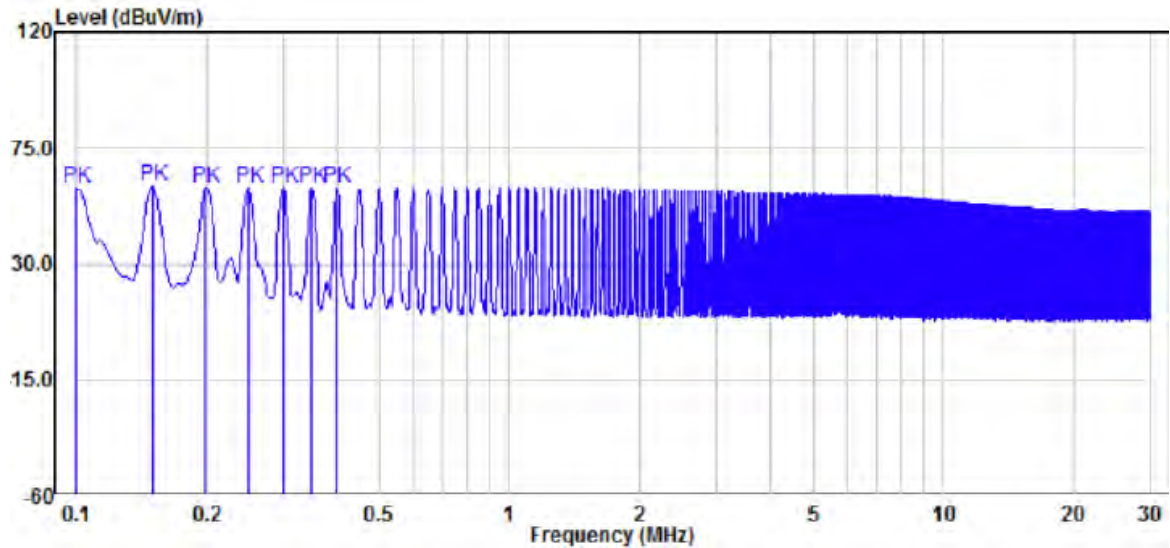
Comb Generator

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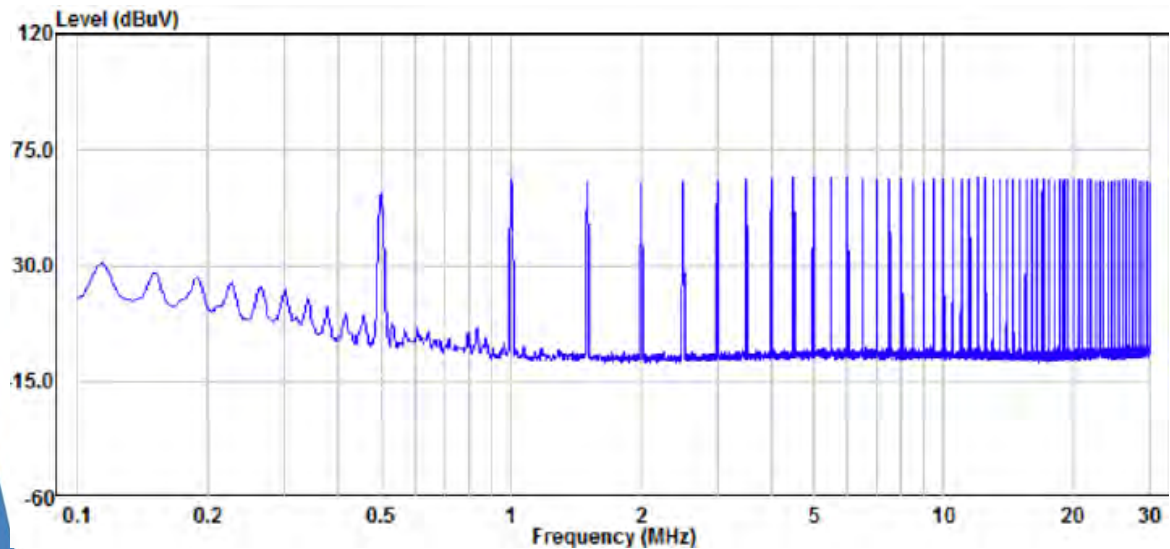
## TEST REPORT

RE : 50kHz ~ 30MHz

50kHz/ step RBW=9kHz / VBW=30kHz @1m



500kHz/ step RBW=9kHz / VBW=30kHz @1m



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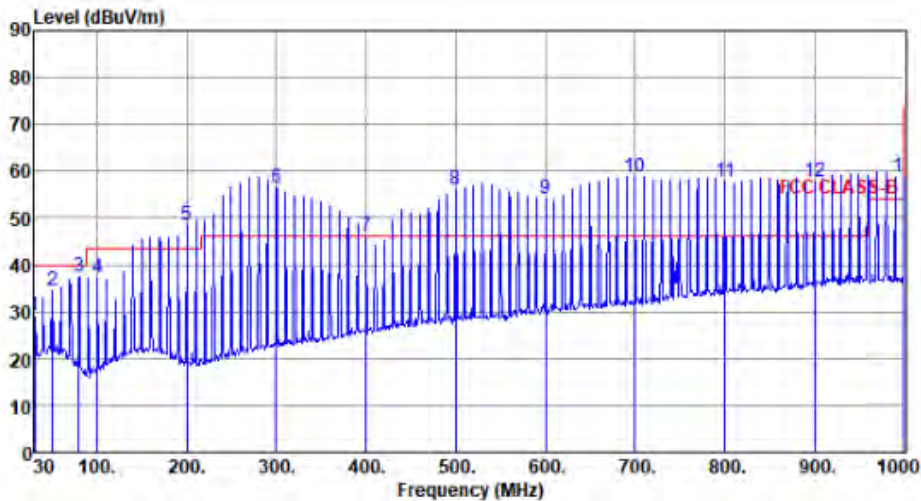


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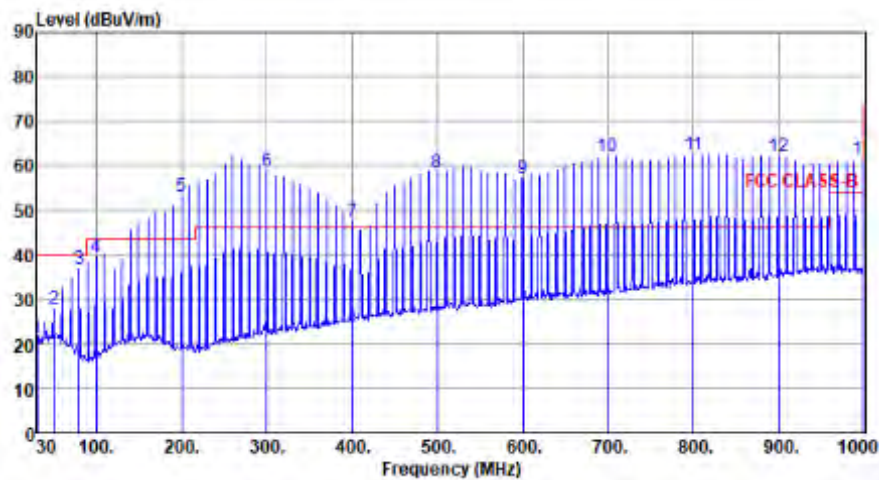
RE : 30MHz ~ 1GHz

10MHz/ step RBW=100kHz / VBW=100kHz @ 3m

## Vertical



## Horizontal



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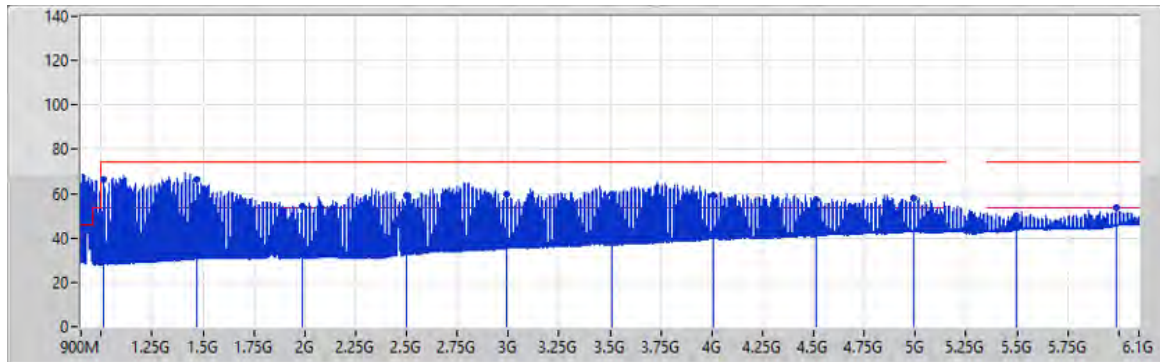
Comb Generator  
**CG 50LR10100R**

## TEST REPORT

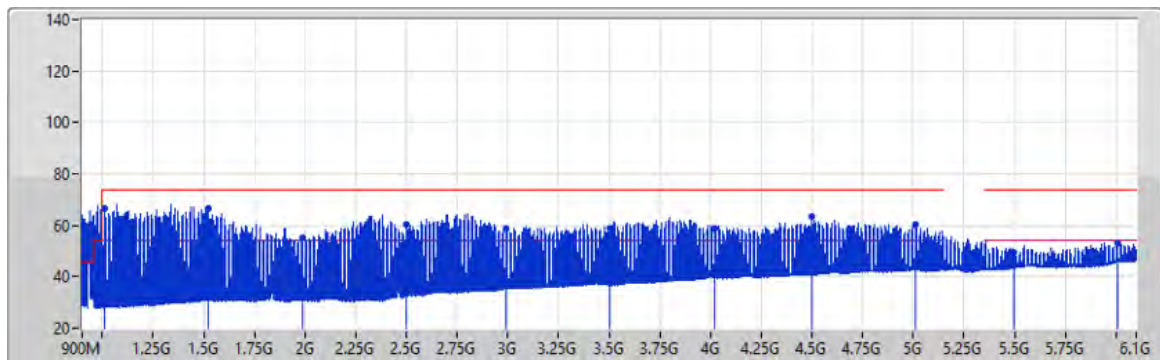
RE : 1GHz ~ 6GHz

10MHz/ step RBW=1MHz / VBW=10kHz @3m

### Vertical



### Horizontal



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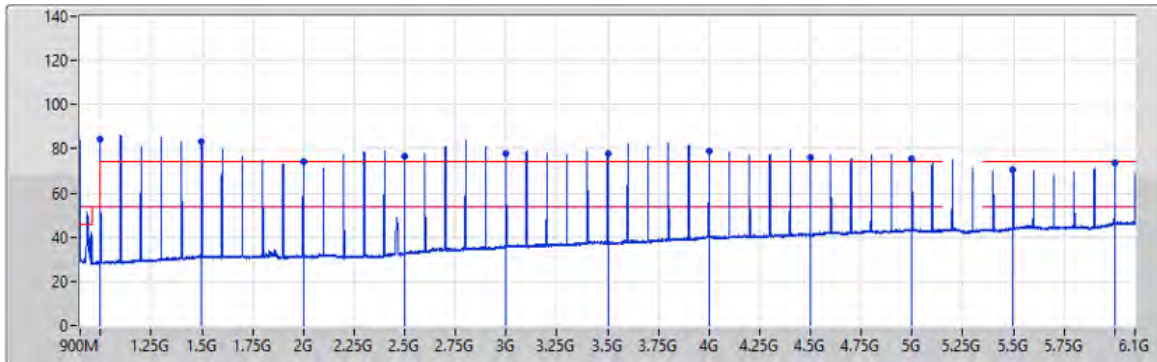
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## TEST REPORT

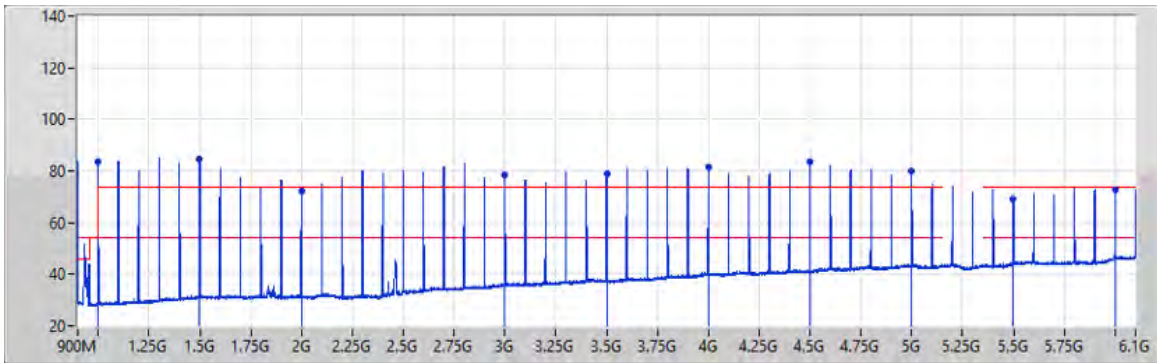
RE : 1GHz ~ 6GHz

100MHz/ step RBW=1MHz / VBW=10kHz @3m

### Vertical



### Horizontal



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