

High Frequency Comb Generator Emitter CGE01

Introduction

The Comb Generator Emitter (CGE) was developed by York EMC Services for the evaluation of shielding effectiveness for small enclosures. In recent years the advance in electronic equipment, particularly in the computer processor industry, has resulted in the use of frequencies well above the current EMC test standard of 30MHz to 1GHz. As a result CGE01 has been developed in response to the requirement to verify small enclosures, particularly computer chassis, above 1GHz.

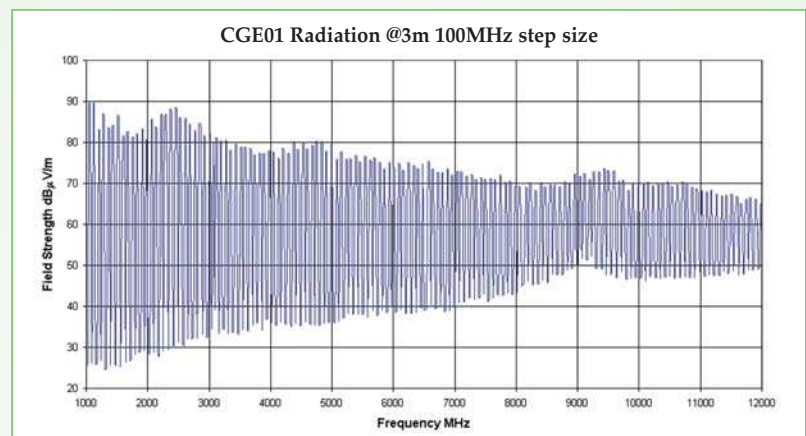
Description

The CGE01 is a broadband comb generator emitter with a useable output from 100MHz to beyond 12GHz. In contrast to the usual comparison noise emitters (CNE), the comb generator approach has been adopted because it lends itself more to the application. At higher frequencies the comb spectrum gives a higher output at specific frequencies which enables a shielding measurement to be made at those frequencies. It also allows a much smaller physical construction due to reduced power consumption. The unit is battery powered so that it can be operated as an independent source without the effect of cables, which would modify the fields generated. An LED indicates when the battery power is low. The CGE is housed in a plated metal cylindrical enclosure, thus ensuring uniformity of the field and can be orientated to give vertical or horizontal polarisation.



Technical Details

Frequency range	100MHz - 12GHz
Step size	80MHz or 100MHz
Power Source	NiMH Rechargeable Battery pack
Battery Life	7.5 hours
Charging connector	2.1mm DC socket
Size	Diameter 80mm Height 88mm
Finish	Nickel plated aluminium
Weight	500g



Applications

- ◆ Shielding effectiveness of small enclosures.
- ◆ As a reference source for radiated measurement systems:
 - Daily pre-test checks.
 - Long term performance monitoring.
- ◆ Investigation of measurement system.

Ordering Information

Order Code CGE01