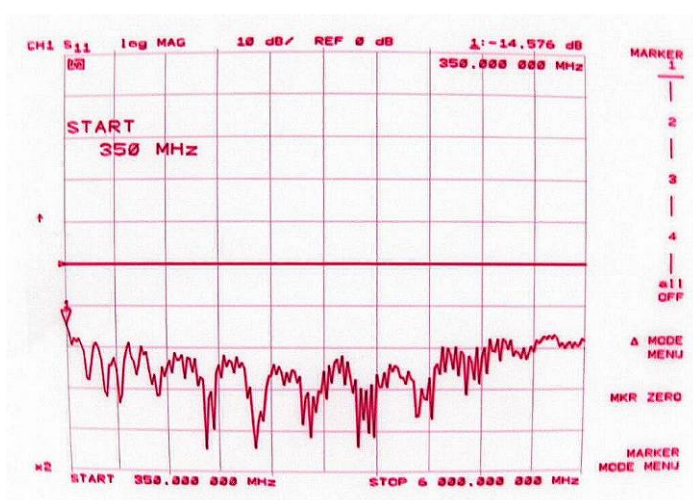


EMC GTEM-500

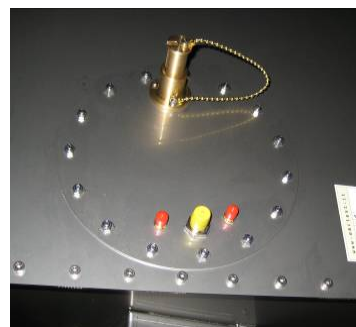
Gtem Cell

Introduction

The GTEM cell is a TEM waveguide with the upper frequency limit extended to the GHz range. It is under consideration as an alternative measurement facility for both radiated emission and immunity measurements. It is included in the recently published standard IEC 61000-4-20 "Emission and Immunity Testing in Transverse Electromagnetic (TEM) Waveguides".



Typical SWR pattern



Technical Panel



Multipolar Filter



Apex



273, Marecchiese Str.
 47900 – RIMINI (RN) - Italy
 Tel. +39 0541 728562 Fax +39 0541 1792293
emctest@gmail.com

Makes your EMC Test easier!

Key Features

- Engineered and completely manufactured in Italy.
- Ruggedized fully INOX steel construction
- Unique compact design.
- Optimized for EMI and EMC.
- Strong fields achieved with low input power
- Broadband up to 6GHz (up-gradable up to 20Ghz.)
- High effective shielding
- 4 poles 450Vac 50Hz 40A filter standard
- Excellent quality at Low cost

Theory of operation

GTEM-cells (Giga-hertz Transversal Electro-Magnetic cells) are waveguide structures intended for electromagnetic compatibility measurements, as well as biomedical applications. The electromagnetic field distribution inside the cell is in TEM mode. With TEM mode propagation, there is no component of electric and magnetic field in the direction of propagation of electromagnetic wave. Therefore the field components are strictly perpendicular. Assuming the field distribution ideal TEM below the cut-off frequency of the cell (before the introduction of higher order modes), the electromagnetic field distribution can be considered static.

Applications

- EMI and EMS devices
- Radiation and susceptibility test
- Specifically designed for telecom application
- Biomedical and dosimetric applications
- Isotropic sensors calibration
- Receiver sensitivity test

Specifications *

Operating range:	0,1MHz-6GHz (0,1MHz-20GHz)
RF Input	max continuous. input power: 100W RF
Input connector type	"N" UG-21 connector
Shielding:	better than 60 to 100dB depending from frequencies
Absorbers:	350 mm anecoic pyramidal foam
Outer cell dimension:	(L)235x(W)125x(H)85 cm
Door Size:	45 x 40 cm
Construction	Fully inox steel 10/10 and 20/10

Technical panel *

Power supply / Filter box - In and out. *

N.1 Feed-thru "SMA/BNC" connector	N.1 40 amp. 450VAC, three phase + Neutral + Ground line filter
N.2 Feed-thru "SMA-SMA" connectors	
N.1 feed-thru fibre optic penetration for 1 couples.	

Options



273, Marecchiese Str.
47900 – RIMINI (RN) - Italy
Tel. +39 0541 728562 Fax +39 0541 1792293
emctest@gmail.com

Makes your EMC Test easier!

Inspection window with shielded polycarbonate glass 20 cm Diam.
Feedthrough panels, pipes connector
multi holes feed-thru fibre optic penetration for 3 or 6 couples.
N.1 filtered 10 poles connector 10A 600Vdc
N.3 filtered banana sockets 1A 1000Vac
Honeycomb air vents
Exhaust fan
TDK 6mm. ferrite tiles on the bottom

* data subject to variations without notice
