



# GTEM 250A-V TEST CELL FOR ELECTROACOUSTICS - HEARING AIDS IEC 60118-13



GTEM 250A-V with options OPL 250 and XYZ manipulator

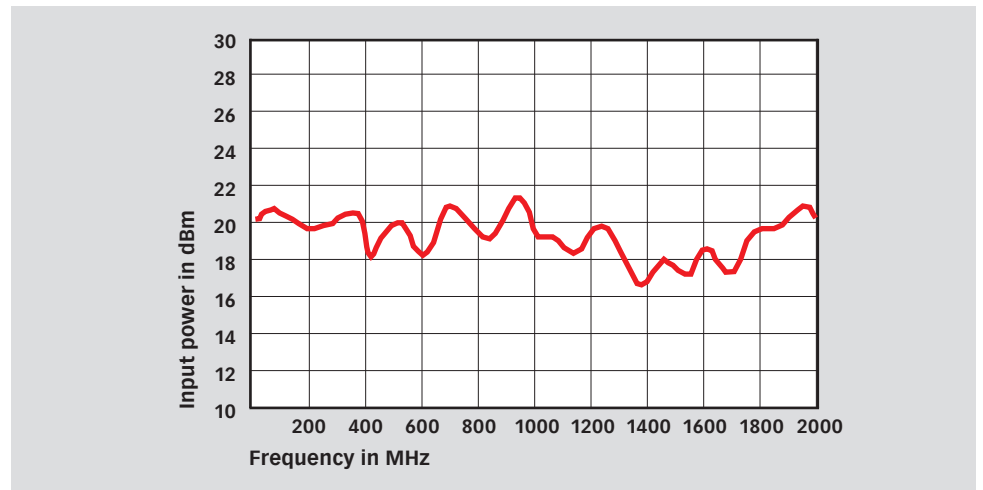
- Vertical solution for space saving
- Meets IEC/EN 61000-4-20, IEC 60118-13 and others
- For 100 Watts input power
- Excellent VSWR up to 18 GHz

A GTEM (Gigahertz Transverse Electro Magnetic) cell is a test site for efficiently performing both radiated immunity and emissions testing in a single, controllable and shielded environment. Compared to other test sites, GTEM testing is faster with high accuracy and excellent reproducibility.

In principle, the GTEM cell is a coaxial line expanding pyramidally and having an impedance of 50 Ω. At its end, the line is terminated by a combination of termination resistors and RF absorbers designed and constructed to match the above mentioned impedance.

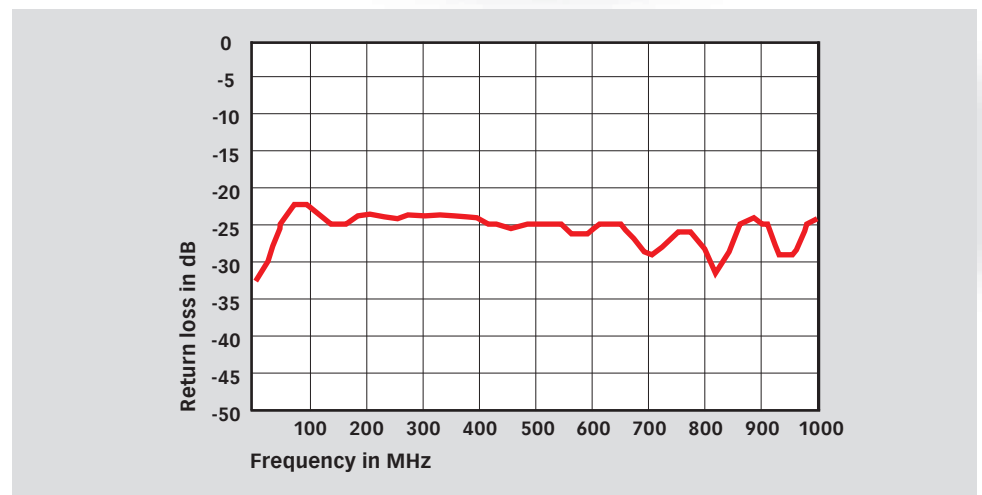
Teseq offers with GTEM 250A a cell with excellent VSWR for improved testing in the entire frequency. The version V allows the vertical and space saving positioning on a desktop. The GTEM 250A-V is ideal for testing on electroacoustics - hearing aids as given in IEC 60118-13 because of the excellent parameters and option for XYZ manipulator.

Required input power for field strength of 10 V/m (Y axis, typical values)

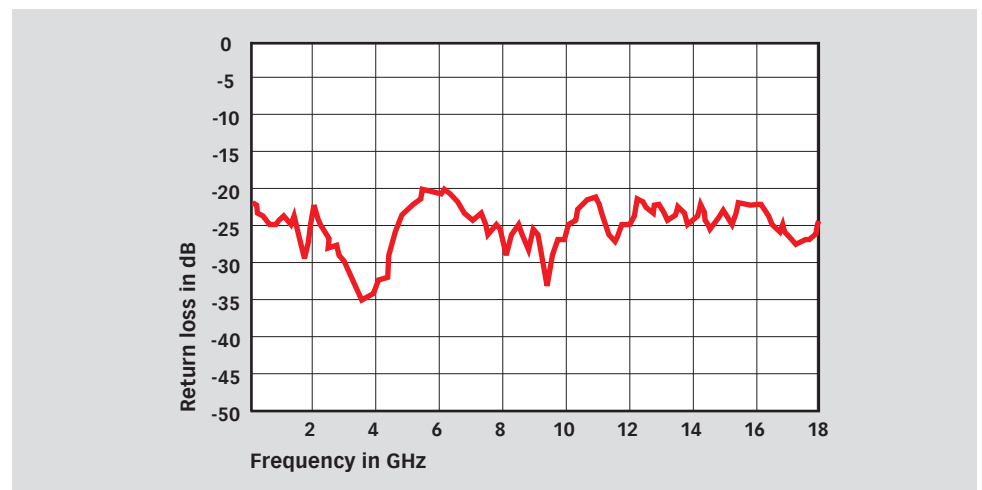


# **GTEM 250A-V** **TEST CELL FOR ELECTROACOUSTICS -** **HEARING AIDS IEC 60118-13**

Return loss (typical values) in the frequency range 1 MHz to 1 GHz

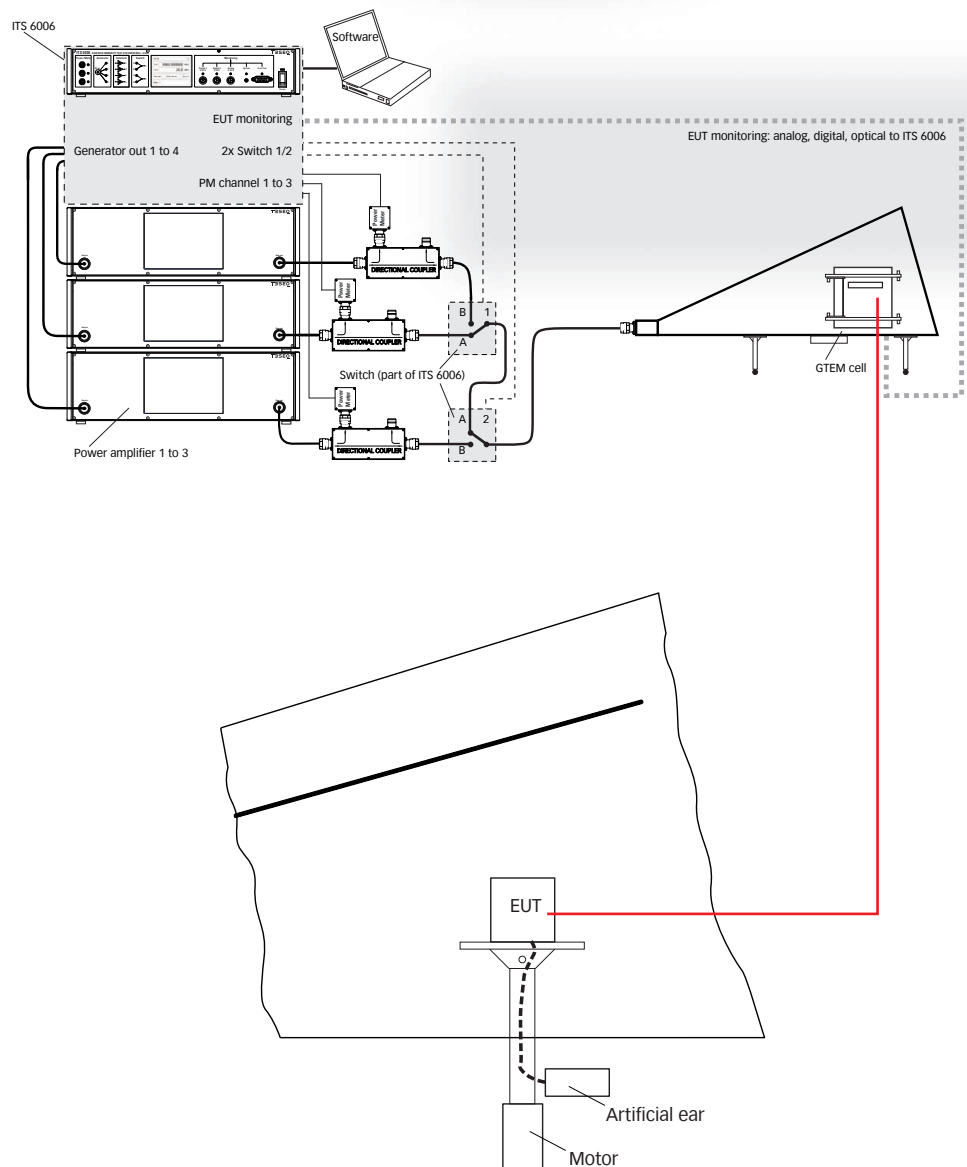


Return loss (typical values) in the frequency range 1 to 18 GHz



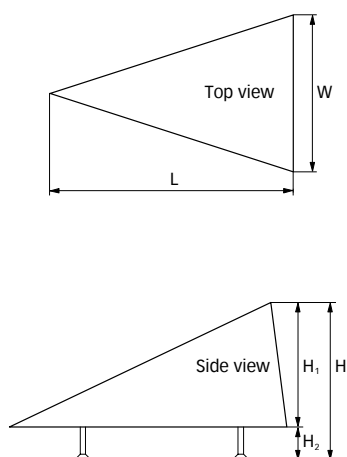
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Example of a typical immunity test setup to 6 GHz



# GTEM 250A-V

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### Technical specifications

Max. septum height:	250 mm
Septum height at marker position:	217 mm
Dimension (LxWxH in m):	1.25 x 0.65 x 0.45
Weight:	45 kg
Height H <sub>1</sub> of cell corpus:	0.345 m
Height H <sub>2</sub> of supports:	0.105 m
Door (LxH in m):	0.20 x 0.13
EUT size (max. dimension, LxWxH in m):	0.20 x 0.20 x 0.15
EUT dimension for uniform-area 0 to 6 dB (LxWxH) in m:	0.083 x 0.083 x 0.083
RF-input connector:	N-type
Nominal impedance:	50 Ω
Frequency range:	DC up to 20 GHz
Frequency range according IEC/EN 61000-4-20:	30 to 1000 MHz
Typical return loss / VSWR:	≥ 20 dB / <1.25:1
Max input power (without additional external air cooling, without any EUT waste heat)	
below 1 GHz:	100 W for 15 min
above 1 GHz:	100 W continuous
Operating temperature:	+5°C to +30°C
Temperature range for this specification:	+20°C to 28°C
Typical shield characteristic (without any filter)	
10 MHz to 1 GHz:	100 dB
1 to 6 GHz:	90 dB
6 to 18 GHz:	80 dB

### Model No. and options

Part number	Description
255270	GTEM 250A-V GTEM with septum height 250 mm, 100 W, low VSWR, vertical position
251970	SHW 250 Shielded window for GTEM 250 door (SHD 1), order only with GTEM
225569	OPL 250 Option for GTEM 250: Feed through for fiber optics, order only with GTEM
Note: XYZ manipulator solutions on request.	

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