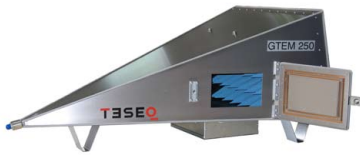




GTEM 250 GTEM CELL FOR EMISSIONS AND IMMUNITY TESTING



GTEM 250

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.

The GTEM 250 has a maximum septum height of 250 mm and is suitable for emissions and immunity testing.

- Emissions and immunity testing in a single, shielded environment
- Meets basic standard: IEC/EN 61000-4-20
- Meets standards for emissions testing: CISPR 14-1, IEC 61000-6-3 and IEC 61000-6-4 for EUTs without connected cables
- Meets standards for immunity testing: EN 60118-13
- Ideal for design qualification and pre-certification
- Fields generated are largely homogeneous and simple to calculate
- Efficient power conversion requires smaller power amplifier
- Excellent VSWR over the entire frequency range - no need for measurement of reflected power

Standard configuration:

- Desktop version
- Door on the right side, clear opening of 20 cm x 13 cm
- EUT BOX for free application
- Fan with power supply unit for countries EU, AUS, UK, US/JP
- Emission correlation tool (Windows software for manual input)
- Measurement report for TDR and VSWR
- Measurement report for input power requirements for 10 V/m (80 - 1000 MHz)
- Shipped assembled

Options:

- POW 250, extended version for 100 W RF-input power
- OPL 250, feed through for fiber optics
- Special filter solutions
- Endwise version
- ETV 250, extended test volume for GTEM 250 in direction to the input section, lowest septum height of 100 mm, max. EUT size of 30 x 30 x 30 mm at 100 mm septum height
- SHD 1, additional door, clear opening of 20 cm x 13 cm
- SHW 250, shielded window, 12 cm x 7 cm
- Manipulator solution
- Test house software for emission and immunity testing



GTEM 250-SAE, view to the special opening

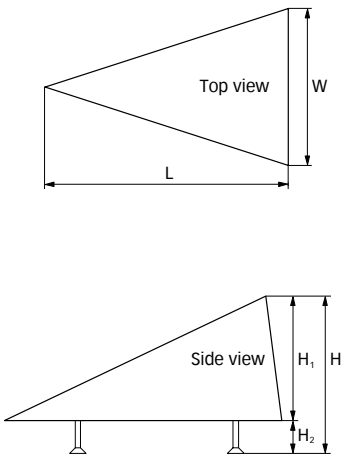


GTEM 250

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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 ₁ of cell corpus:	0.345 m
Height H ₂ 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
Return loss / VSWR (DC to 18 GHz):	>15 dB / <1.45:1
Shielding effectiveness (30 MHz to 3 GHz):	>60 dB (typ. >80 dB)
Max input power:	50 W (100 W with option POW 250)

Model No. and options

Part number	Description
225500	GTEM 250 GTEM with septum height 250 mm, 50 W
243608	GTEM 250-SAE GTEM with septum height 250 mm, 50 W, with special opening to test IC with approx. 45 mm septum height, meets SAE 1752/3, IEC 62132-2 and IEC 61967-2
252925	GTEM 250A-SAE GTEM with septum height 250 mm, 100 W, low VSWR, with special opening to test IC with approx. 45 mm septum height, meets SAE 1752/3, IEC 62132-2 and IEC 61967-2
251710	POW 250 Option for GTEM 250: Extended version for 100 W RF-input power, order only with GTEM



GTEM 250

GTEM CELL FOR EMISSIONS AND IMMUNITY TESTING



Model No. and options (continued)

251720	ETV 250 Option for GTEM 250: Extended test volume for GTEM 250 in direction to the input section, lowest septum height of 100 mm, max. EUT size of 30 x 30 x 30 mm @ 100 mm septum height, special shipment required, order only with GTEM
251970	SHW 250 Shielded window for GTEM 250 door (SHD 1), order only with GTEM
225583	SIA 250 Option for GTEM 250: Upgrade of empty EUT BOX (included in standard delivery) to 10 x 15 A filter with banana jacks, 4x 5 A filter with Sub-D 9 pins, order only with GTEM 250
225584	SIB 250 Option for GTEM 250: Upgrade of empty EUT BOX (included in standard delivery) to 2 x 15 A filter with banana jacks, 37x 5 A filter with Sub-D 37 pins, order only with GTEM 250
255200	SIC 250 Option for GTEM 250: Upgrade of empty EUT BOX (included in standard delivery) to mains port 6 A, 6x filter with banana jacks and 9x filter with Sub-D 9 pins, order only with GTEM 250
255215	SID 250 Option for GTEM 250: Upgrade of empty EUT BOX (included in standard delivery) to mains port 6 A, 2x filter with banana jacks, 1x PE and 15x filter with Sub-D 15 pins, order only with GTEM 250
251150	EUT BOX-250 Option for GTEM 250: Upgrade of empty EUT BOX (included in standard delivery) to 4x 16 A power filter, 250 V AC, banana, order only with GTEM 250
251151	EUT BOX-251 Option for GTEM 250: Filter box with 4x 16 A power filter, 250 V AC, banana, easy exchangeable of standard GTEM 250 filter box
225569	OPL 250 Option for GTEM 250: Feed through for fiber optics, order only with GTEM



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