

MAIN FEATURES

- 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
- Ideal for design qualification and pre-certification

GTEM 1250

GTEM cell for emissions and immunity testing

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 1250 has a maximum septum height of 1250 mm and is suitable for emissions and immunity testing.

Standard configuration

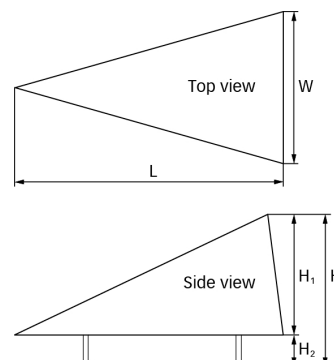
- Under-carriage with locking casters and additional supports
- Door, left or right side, clear opening of 85 cm x 85 cm
- Shielded window 30 cm x 10 cm
- Door contact for free application
- EUT Box-1 with 2x 16 A filter, 1 socket inside, line safety switch, earth leakage circuit breaker, switchable illumination
- Media interface (Media S) for 3x N-type connectors and optical feed through
- Measurement report for TDR, return loss and input power requirements for 10 V/m (30 - 3000 MHz)
- Shipped disassembled, required Teseq supervisor, option ASS 1250

Options

- Special filter solutions
- SSA 1250, stainless steel angles option for GTEM 1250, recommended for countries with high humidity like Thailand, Malaysia, Philippines...
- Additional door
- SAE opening, clear opening of 93.4 mm x 93.4 mm
- XYZ manipulator MPH 1250 or MPC 1250 solution
- Test house software

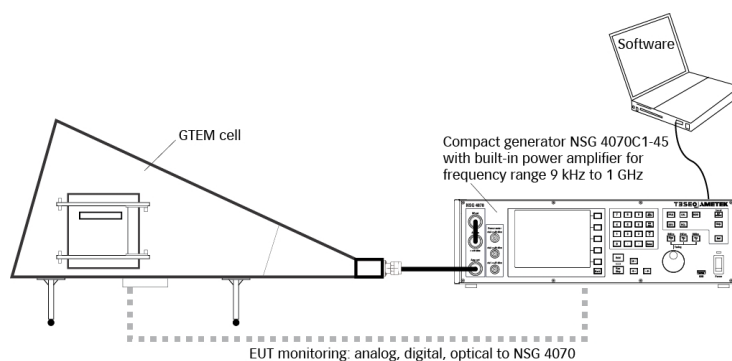
Specifications

	GTEM 1250
Max. septum height	1250 mm
Septum height at marker position	1083 mm
EUT size (max. dimension, LxWxH in m)	0.93 x 0.93 x 0.83
EUT dimension for uniform-area 0 to 6 dB (LxWxH) in m	0.416 x 0.416 x 0.416
RF input connector	N-type
Nominal impedance	50 Ohm
Frequency range	DC up to 20 GHz
Frequency range according IEC/EN 61000-4-20	30 to 3000 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	1000 W
Required input power for 10 V/m (isotropic, 5 points, 30 to 3000 MHz)	15.2 W (4.7 W CW)
Field deviation (isotropic, 5 points, 30 to 3000 MHz)	<6 dB

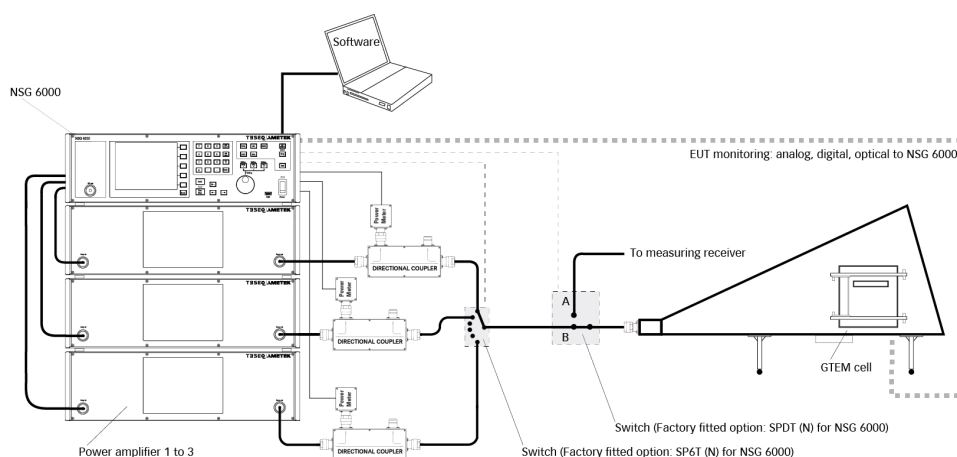


General Specifications

	GTEM 1250
Dimension (LxWxH in m)	5.95 x 3.06 x 2.52
Weight	approx. 1150 kg
Height H1 of cell corpus	2.06 m
Height H2 of supports	0.455 m, optionally 0.19 m or 0.34 m
Door (LxH in m)	0.85 x 0.85



Example of immunity test setup 9 kHz to 1 GHz with one power amplifier



Example of test setup 9 kHz to 6 GHz with three power amplifiers and measuring receiver

Ordering information

The door side and the country version of the single phase AC socket needs to be selected.

**Model No. and options (selection shown for EU only)**

Description	Item No	Text
GTEM 1250-L-EU	258821	GTEM with septum height 1250 mm, support with 16 feet, door on left side with clear opening of 85 cm x 85 cm and shielded window of 30 cm x 10 cm, door contact for free application, EUT Box-1 with 2x 16 A filter, 1 Schuko-socket inside, line safety switch, RCD, switchable illumination, media interface (Media S) for 3x N-type connectors and optical feed through, max. 1000 W RF input power, switchable fans, shipped disassembled, required Teseq supervisor option ASS 1250
GTEM 1250-L-EU-MPH	258822	GTEM with septum height 1250 mm, support with 16 feet door, on left side with clear opening of 85 cm x 85 cm and shielded window of 30 cm x 10 cm, door contact for free application, EUT Box-1 with 2x 16 A filter, 1 Schuko-socket inside, line safety switch, RCD, switchable illumination, media interface (Media S) for 3x N-type connectors and optical feed through, max. 1000 W RF input power, switchable fans, shipped disassembled, required Teseq supervisor option ASS 1250, XYZ-manipulator handoperated included
GTEM 1250-L-EU-MPC	258823	GTEM with septum height 1250 mm, support with 16 feet door, on left side with clear opening of 85 cm x 85 cm and shielded window of 30 cm x 10 cm, door contact for free application, EUT Box-1 with 2x 16 A filter, 1 Schuko-socket inside, line safety switch, RCD, switchable illumination, media interface (Media S) for 3x N-type connectors and optical feed through, max. 1000 W RF input power, switchable fans, shipped disassembled, required Teseq supervisor option ASS 1250, remote controlled XYZ-manipulator included
GTEM 1250-R-EU	258814	GTEM with septum height 1250 mm, support with 16 feet door, on right side with clear opening of 85 cm x 85 cm and shielded window of 30 cm x 10 cm, door contact for free application, EUT Box-1 with 2x 16 A filter, 1 Schuko-socket inside, line safety switch, RCD, switchable illumination, media interface (Media S) for 3x N-type connectors and optical feed through, max. 1000 W RF input power, switchable fans, shipped disassembled, required Teseq supervisor option ASS 1250
GTEM 1250-R-EU-MPH	258815	GTEM with septum height 1250 mm, support with 16 feet door, on right side with clear opening of 85 cm x 85 cm and shielded window of 30 cm x 10 cm, door contact for free application, EUT Box-1 with 2x 16 A filter, 1 Schuko-socket inside, line safety switch, RCD, switchable illumination, media interface (Media S) for 3x N-type connectors and optical feed through, max. 1000 W RF input power, switchable fans, shipped disassembled, required Teseq supervisor option ASS 1250, XYZ-manipulator handoperated included
GTEM 1250-R-EU-MPC	258816	GTEM with septum height 1250 mm, support with 16 feet door, on right side with clear opening of 85 cm x 85 cm and shielded window of 30 cm x 10 cm, door contact for free application, EUT Box-1 with 2x 16 A filter, 1 Schuko-socket inside, line safety switch, RCD, switchable illumination, media interface (Media S) for 3x N-type connectors and optical feed through, max. 1000 W RF input power, switchable fans, shipped disassembled, required Teseq supervisor option ASS 1250, remote controlled XYZ-manipulator included