



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 1500

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 1500 has a maximum septum height of 1500 mm and is suitable for emissions and immunity testing.

Standard configuration

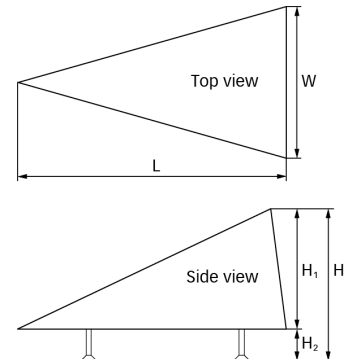
- Under-carriage with locking casters and additional supports
- Door, left or right side, clear opening of 99 cm x 129 cm
- Shielded window 30 cm x 10 cm
- Door contact for free application
- EUT Box-1 with 2x 16 A filter, 1 socket inside, line safety switch, earth leakage circuit breaker, switchable 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 1500

Options

- Special filter solutions
- SSA 1500, stainless steel angles option for GTEM 1500, 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 1500 or MPC 1500 solution
- Test house software

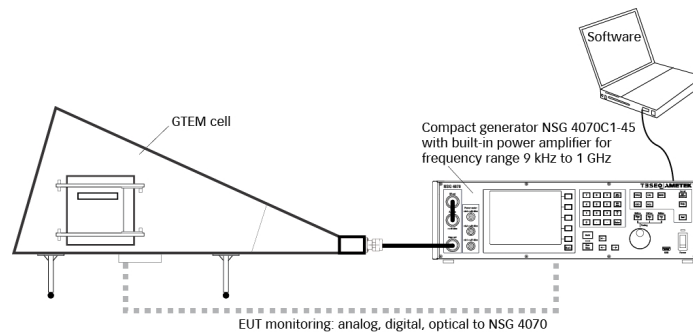
Specifications

	GTEM 1500
Max. septum height	1500 mm
Septum height at marker position	1299 mm
EUT size (max. dimension, LxWxH in m)	1.11 x 1.11 x 0.99
EUT dimension for uniform-area 0 to 6 dB (LxWxH) in m	0.5 x 0.5 x 0.5
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)	>13 dB (typ. >15 dB) / <1.6:1 (typ. <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)	21.9 W (6.8 W CW)
Field deviation (isotropic, 9 points, 30 to 3000 MHz)	<6 dB

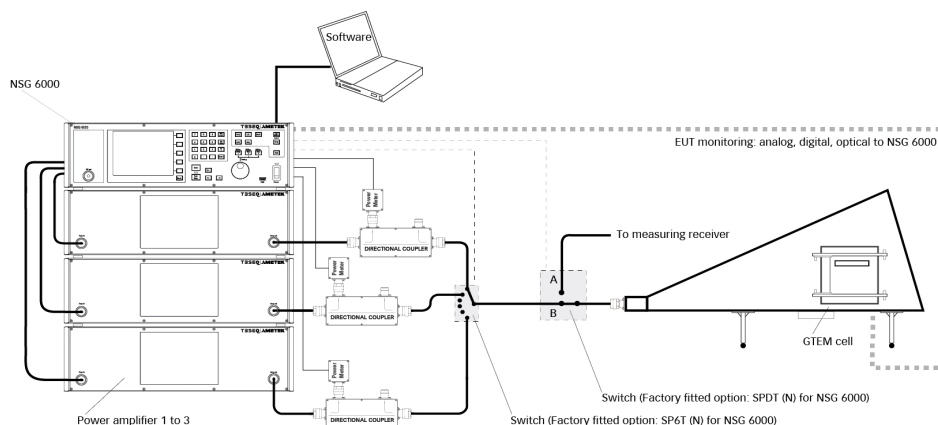


General Specifications

	GTEM 1500
Dimension (LxWxH in m)	6.87 x 3.63 x 2.54
Weight	approx. 1470 kg
Height H1 of cell corpus	2.41 m
Height H2 of supports	0.19 m, optionally 0.455 m or 0.34 m
Door (LxH in m)	0.99 x 1.29



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 1500-L-EU	258863	GTEM with septum height 1500 mm, support with 25 feet, door on left side with clear opening of 99 cm x 129 cm, 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 1500
GTEM 1500-L-EU-MPH	258864	GTEM with septum height 1500 mm, support with 25 feet, door on left side with clear opening of 99 cm x 129 cm, 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 1500, XYZ-manipulator handoperated included
GTEM 1500-L-EU-MPC	258865	GTEM with septum height 1500 mm, support with 25 feet, door on left side with clear opening of 99 cm x 129 cm, 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 1500, remote controlled XYZ-manipulator included
GTEM 1500-R-EU	258856	GTEM with septum height 1500 mm, support with 25 feet, door on right side with clear opening of 99 cm x 129 cm, 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 1500
GTEM 1500-R-EU-MPH	258857	GTEM with septum height 1500 mm, support with 25 feet, door on right side with clear opening of 99 cm x 129 cm, 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 1500, XYZ-manipulator handoperated included
GTEM 1500-R-EU-MPC	258861	GTEM with septum height 1500 mm, support with 25 feet, door on right side with clear opening of 99 cm x 129 cm, 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 1500, remote controlled XYZ-manipulator included