



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 1750

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 1750 has a maximum septum height of 1750 mm and is suitable for emissions and immunity testing.

Standard configuration

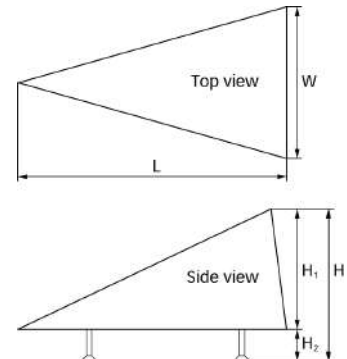
- Under-carriage with locking casters and additional supports
- Door, left or right side, clear opening of 103 cm x 154 cm
- Shielded window 30 cm x 10 cm
- Door contact for free application
- EUT Box-1 with 2x 16 A filter, 1 socket inside, line safety switch, earth leakage circuit breaker, switchable 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 1750

Options

- Special filter solutions
- SSA 1750, stainless steel angles option for GTEM 1750, 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 1750 or MPC 1750 solution
- Test house software

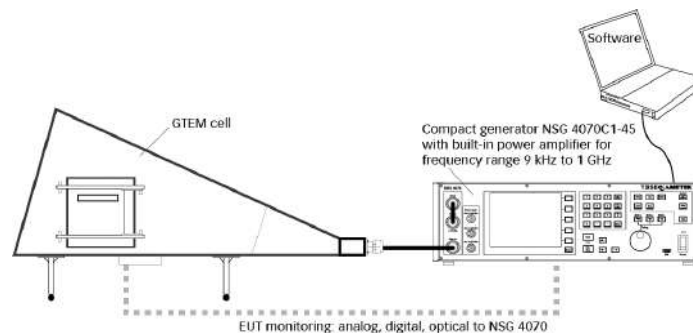
Specifications

	GTEM 1750
Max. septum height	1750 mm
Septum height at marker position	1516 mm
EUT size (max. dimension, LxWxH in m)	1.32 x 1.32 x 1.16
EUT dimension for uniform-area 0 to 6 dB (LxWxH) in m	0.583 x 0.583 x 0.583
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)	>11 dB (typ. >15 dB) / <1.8:1 (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)	30 W (9.2 W CW)
Field deviation (isotropic, 9 points, 30 to 3000 MHz)	<6 dB

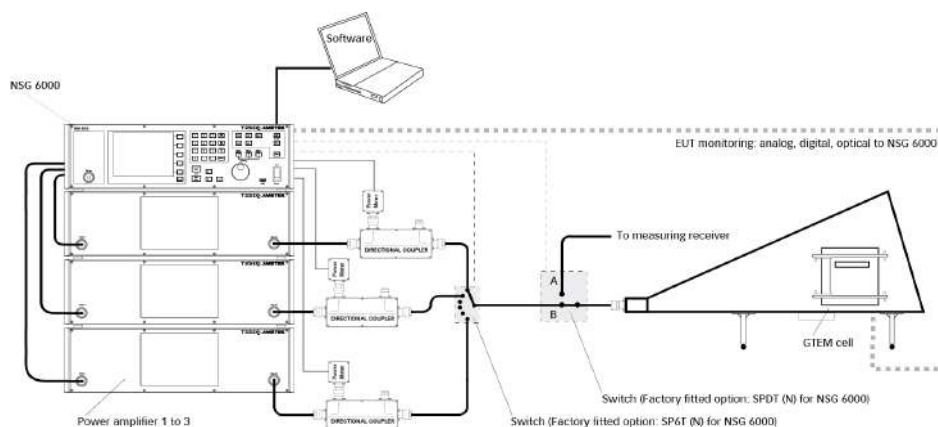


General Specifications

	GTEM 1750
Dimension (LxWxH in m)	7.87 x 4.10 x 2.94
Weight	approx. 1800 kg
Height H1 of cell corpus	2.75 m
Height H2 of supports	0.19 m, optionally 0.455 m
Height H2 of supports with option MPC 1750	0.455 m
Door (LxH in m)	1.03 x 1.54



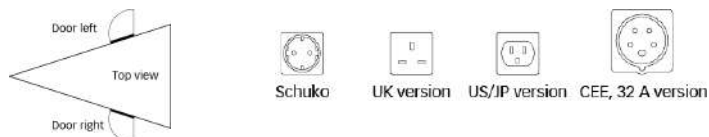
Example of immunity test setup 9 kHz to 1 GHz with one power amplifier



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 1750-L-EU	258877	GTEM with septum height 1750 mm, support with 28 feet, door on left side with clear opening of 103 cm x 154 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 1750
GTEM 1750-L-EU-MPH	258878	GTEM with septum height 1750 mm, support with 28 feet, door on left side with clear opening of 103 cm x 154 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 1750, XYZ-manipulator handoperated included
GTEM 1750-L-EU-MPC	258879	GTEM with septum height 1750 mm, support with 28 feet, door on left side with clear opening of 103 cm x 154 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 1750, remote controlled XYZ-manipulator included
GTEM 1750-R-EU	258870	GTEM with septum height 1750 mm, support with 28 feet, door on right side with clear opening of 103 cm x 154 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 1750
GTEM 1750-R-EU-MPH	258871	GTEM with septum height 1750 mm, support with 28 feet, door on right side with clear opening of 103 cm x 154 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 1750, XYZ-manipulator handoperated included
GTEM 1750-R-EU-MPC	258872	GTEM with septum height 1750 mm, support with 28 feet, door on right side with clear opening of 103 cm x 154 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 1750, remote controlled XYZ-manipulator included