

Ultra Compact Chamber – UCC

for 1.0 m Measuring Distance

Short Description

The UCC was designed as an alternative to GTEM-Cells for pre-compliance measurements as well as for the fields of research and science. The walls and the ceiling of the chamber are lined completely with ferrite absorbers and the rear wall next to the EUT has an additional hybrid absorber lining of 6 m², which qualifies the chamber for measurements in the frequency range from 30 MHz to 18 GHz. The most important advantages, compared to GTEM-Cells, are the facts that the staff can walk into this chamber (more simple EUT setup), the practical test setup with corresponding cable feeding to peripheral equipment, as well as the possibility of taking larger test specimen into the chamber. The UCC can be used for pre-compliance radiated emission measurements and immunity tests according to the standard IEC/EN 61000-4-3 in 1.0 m measuring distance. In addition, it is very well suited for pre-compliance measurements of automotive components according to DIN/ISO 11452-2 and EN 55025 (CISPR 25). If required, the UCC can also be used as a normal shielded room for conducted testing. Because of its small dimensions the chamber can be placed in normal laboratories or office rooms.



Technical specifications

External dimensions (L x W x H)	4,280 mm x 3,080 mm x 2,550 mm
Frequency range	30 MHz to 18 GHz
Measuring distance	1 m
Absorber lining	
Walls and ceiling	Ferrite absorbers, type F006
Rear wall showing to EUT	6 m ² hybrid absorbers, type HF300
Floor	2 m ² ferrite absorbers between EUT and antenna
Emission measurements	Pre-compliance measurement
Immunity tests	Full compliance measurement acc. to IEC/EN 61000-4-3 for a measuring distance of 1.0 m
Size of the uniform area acc. to IEC/EN 61000-4-3	0.5 m x 0.5 m
Max. deviation	-0 dB / +6 dB at 4 of 4 measuring points

Standard Equipment

- 1 access door, 1.013 x 2.043 mm
- 1 honeycomb insert for ventilation
- 1 mains filter 250 VAC, 2 x 16 A
- 1 penetration panel
- Feed-throughs: 4 x "N", 4 x "BNC" and 1 x for fibre optics
- Electric installation
- Illumination
- Raised floor
- Absorber lining

Options

- 3 phase mains filter
- Signal and / or data line filter
- Fan
- Antenna tripod
- Video and / or audio system
- Verification of the chamber
- Measuring equipment
- Other extras