



Description

The closed TEM-cells TEMF 200 and TEMF 500 are specially designed for immunity tests on automotive devices according to ISO 11452-3 and to SAE J1113-24. The TEMF 1000 and TEMF 3000 allow immunity tests on small devices and require a low power amplifier. Therefore the test installation is much cheaper compared to an absorber room with antennas. The TEM (Transverse Electro-Magnetic) mode is the only mode produced in the cell below the cut-off frequency. The electric field is

vertical, the magnetic field horizontal and the wave impedance 377Ω . The field conditions inside the cell are similar to far field conditions. An optional filter box can be placed behind the cell for power and signal line connections. For automotive tests the recommended minimum amplifier power is 100 W (TEMF 200) and 50 W (TEMF 500). It is also possible to use the cell for radiation measurements under certain conditions.

Technical specifications	TEMF 200	TEMF 500	TEMF 1000 *	TEMF 3000 *
Frequency range	DC - 200 MHz	DC - 500 MHz	DC - 1 GHz	DC - 3 GHz
Height under the plate	30 cm	10 cm	7.3 cm	2.35 cm
Dimensions (LxWxH)	130 x 70 x 62 cm	60 x 30 x 22 cm	54 x 45 x 18 cm	15 x 8 x 6 cm
Max. input power	1.6 kW long term	1 kW long term	750 W long term	400 W long term
Field for a 25 W amplifier	118 V/m	350 V/m	475 V/m	1.4 W/m
Impedance	$50 \Omega \pm 5 \Omega$	$50 \Omega \pm 5 \Omega$	$50 \Omega \pm 7 \Omega$	$50 \Omega \pm 7 \Omega$
VSWR	< 1.1	< 1.1	< 1.2	< 1.2
Return loss	> 25 dB	> 25 dB	> 20 dB	> 20 dB
Connector type	N 50 Ω	N 50 Ω	N 50 Ω	N or SMA 50 Ω
Weight	approx. 29 kg	approx. 20 kg	approx. 4.8 kg	approx. 1.6 kg
Options	Signal and power supply filters			
	* Can be equipped with a test setup for IC or PCB acc. to SAE J1752-3			

Other models are available on request