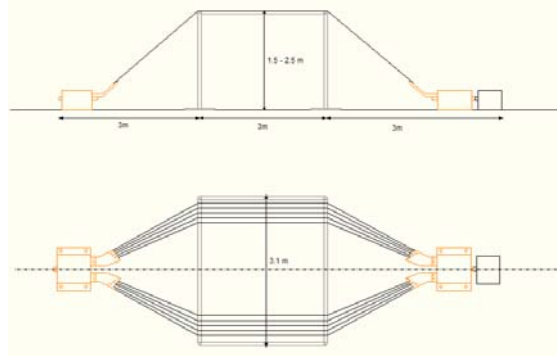




## E/H Field Generator

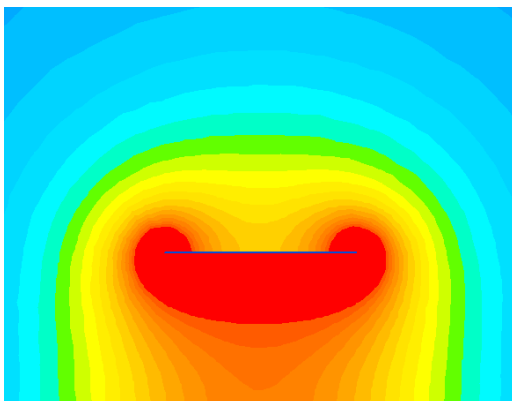


The E/H field generator is specially designed for the immunity test to electromagnetic fields on medium-sized devices. It can also be used for specific tests according to the MIL-Standards. The main advantage of this line is that the equipment under test can easily be successively tested in both polarisations without being dismantled. The height of the structure can be adjusted to optimize the field intensity for each equipment under test. The line is electrically symmetrical and the impedance is adapted through transformers on both sides. The parallel plate line can also be used for immunity tests on automotive devices according to the European directive 2004/104/EC or to ISO 11451-2 and on broadcast receivers and associated equipment according to EN 55020.

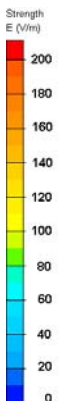
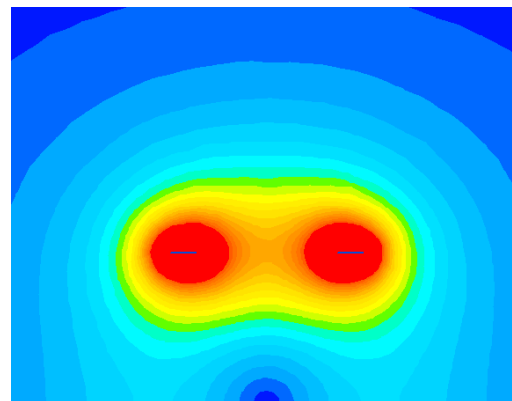
It consists of a structure to be placed in the chamber or in an open area test site. The 2 slopes of the structure and the line are made with wires. The structure can be dismantled easily in order to carry out other tests in the chamber. Some precaution must be taken if the field generator is installed close to metallic structures in order to avoid resonances.

### DISTRIBUTION OF THE FIELD

Setting: vertical polarisation



Setting: horizontal polarisation



*Fig. 1 : Cross view of the distribution of the electric field around the structure (model GENE-H-15-1K / height: 1.5 m / 1 kW amplifier)*



## VARIATION IN THE HEIGHT

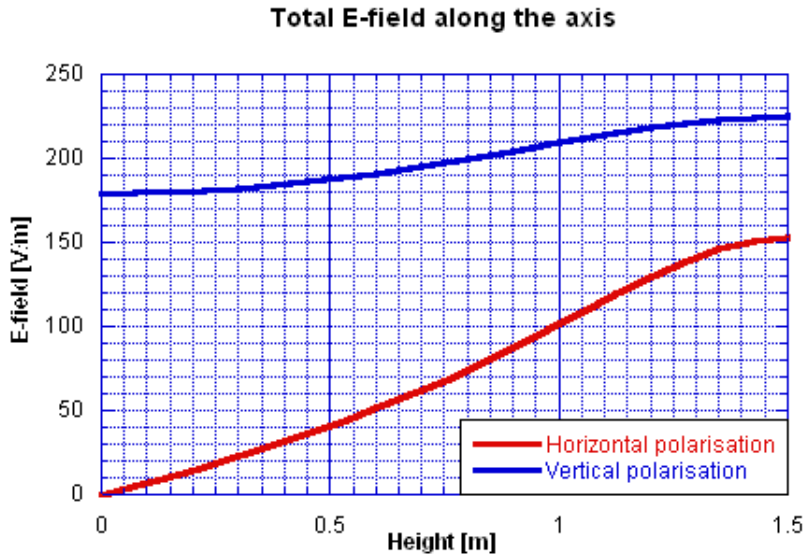


Fig. 2 : Variation of the electric field under the antenna for both polarisation settings (model GENE-H-15-1K / height: 1.5 m / 1 kW amplifier).

## SPECIFICATIONS

Model	GENE-H-15-1K	GENE-H-15-3K	GENE-H-30-1K	GENE-H-30-3K
Height under the plate	1.5 - 2.5 m	1.5 - 2.5 m	2.5 - 3.5 m	2.5 - 3.5 m
Frequency range ( $\pm 1$ dB) (in the lowest position)	10 kHz to 30 MHz	10 kHz to 30 MHz	10 kHz to 30 MHz	10 kHz to 30 MHz
Maximum input power	1 kW long term	3.5 kW long term	1 kW long term	3.5 kW long term
Field for the maximum power (vertical polar.)	220 V/m @ 1 m height	375 V/m @ 1 m height	110 V/m @ 2 m height	200 V/m @ 2 m height
Field for the maximum power (horiz. polar.)	110 V/m @ 1 m height	190 V/m @ 1 m height	55 V/m @ 2 m height	100 V/m @ 2 m height
Line impedance (V / H)	100 $\Omega$ / 200 $\Omega$	100 $\Omega$ / 200 $\Omega$	100 $\Omega$ / 200 $\Omega$	100 $\Omega$ / 200 $\Omega$
Input impedance	50 $\Omega$	50 $\Omega$	50 $\Omega$	50 $\Omega$
Wave impedance	377 $\Omega$	377 $\Omega$	377 $\Omega$	377 $\Omega$
VSWR	< 1.2	< 1.3	< 1.2	< 1.3
Connector type	50 $\Omega$ , type N	50 $\Omega$ , type 7-16	50 $\Omega$ , type N	50 $\Omega$ , type 7-16
Size (L x W x H)	9 x 3.1 x 2.5 m	9 x 3.1 x 2.5 m	15 x 5.2 x 4.2 m	15 x 5.2 x 4.2 m
Weight	120 kg	140 kg	170 kg	190 kg

The specifications and dimensions are given above as an example. Other models are available on request. Dimensions can be adapted to the customer's needs.