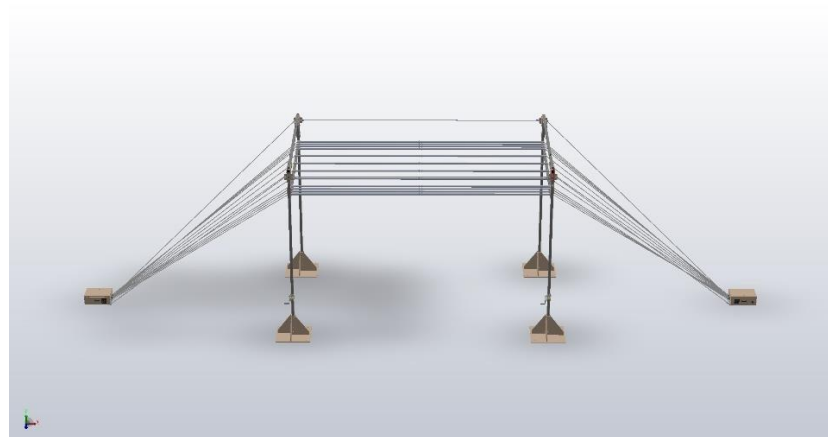


E/H Field Generator



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. The height of the structure can be adjusted to optimize the field intensity. 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.



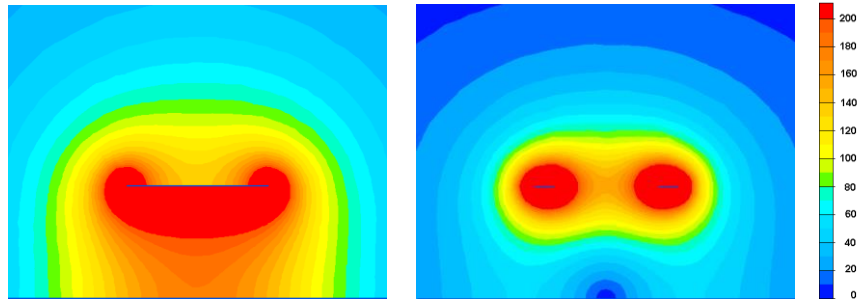
SPECIFICATIONS

Type	GENE-H-30-3K
Height under the septum	Adjustable, 1.5 - 3.5 m
Rectangular area under the septum (L x W)	6.0 x 3.5 m
Frequency range (± 1 dB) (in the lowest position)	10 kHz - 30 MHz
Maximum input power	3 kW long term
E-field for 1 kW	See Figures 1 and 2
Line impedance (V / H)	100 Ω / 200 Ω
Input impedance	50 Ω
Wave impedance	377 Ω
Connector type	50 Ω , type 7-16
Mech. dimensions (L x W x H)	16.3 x 4.2 x 4.2 m
Weight	280 kg

Distribution of the field

Setting: vertical polarisation

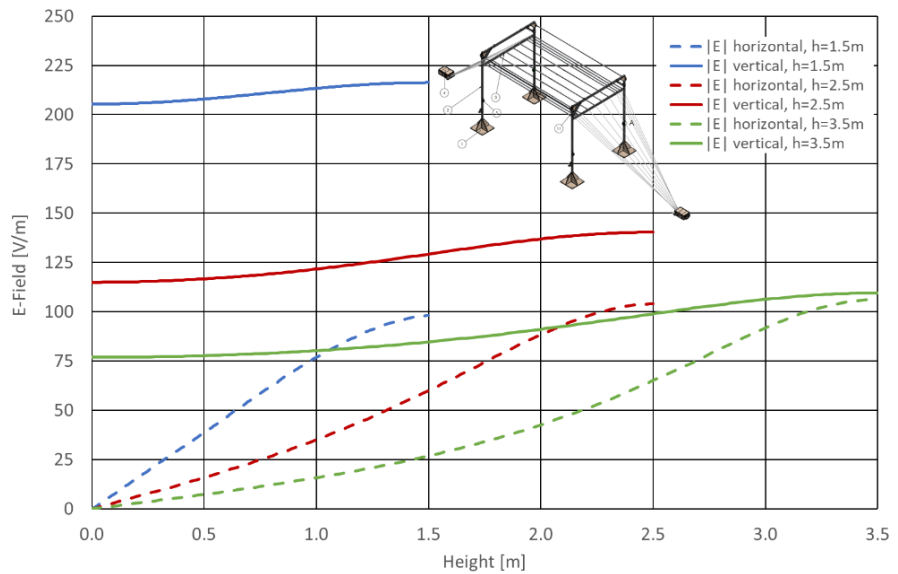
Setting: horizontal polarisation



Cross views of the vertical and horizontal electric field distribution around the septum (height: 1.5 m / 1 kW amplifier)

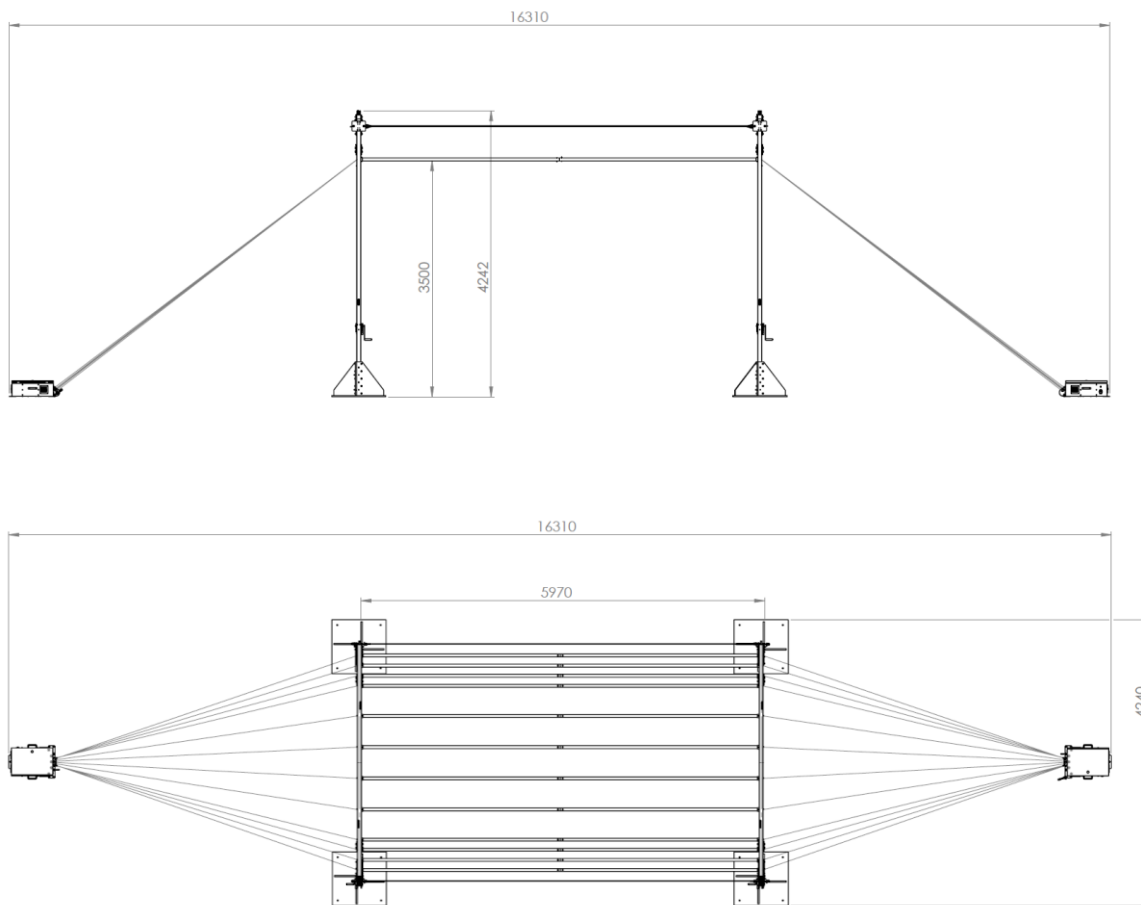
Typical performances

Theoretical electric field for an input power of 1 kW and different septum heights (1.5, 2.5 and 3.5 m) for both vertical and horizontal E-field orientations. The losses of the transformers and the effect of the chamber are neglected.



Overall system dimensions

All dimensions in millimetres.



Ordering information

TYPE	DESCRIPTION
GENE-H-30-3K	E/H field generator, frequency range 10 kHz - 30 MHz, height adjustable 1.5 - 3.5 m, power max 3 kW, connectors 7/16, with portable frame, lines and transformers