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ANTENNA SIMULATION IN ANTENNA MAGUS SOFTWARE PACKAGE

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This article describes the software package Antenna Magus. The article shows the main features of the program, discusses the parameters that can be changed during the simulation of the antenna. Also, it considers the diagram, which the program during the simulation of the antenna.

Product Antenna Magus, developed by Magus (Pty) Ltd and is intended for the design and simulation of various types of antennas, is a database of different antennas, from which the user can select the appropriate parameterized model and export it to the package CST MICROWAVE STUDIO, which is then executed her modeling and optimization.

The package is aimed at the broad masses of developers antennas experts on EMC, as well as system integrators, we have the estimate location of antennas on large objects. The program analyzes the available Antenna Magus design goals and performs intelligent choice lacking initial parameters.

Subsequently, the user can manually adjust the proposed program settings. To implement the technology Smart Design All design goals in Antenna Magus organized into groups. For each of these groups a user is a calculator of parameters, which allows different ways to implement the task, grouping initial targets in the project requirements. Smart Design Technology enables the user to specify only those parameters which are known to him, and fully trust Antenna Magus to get the final results at a design stage.

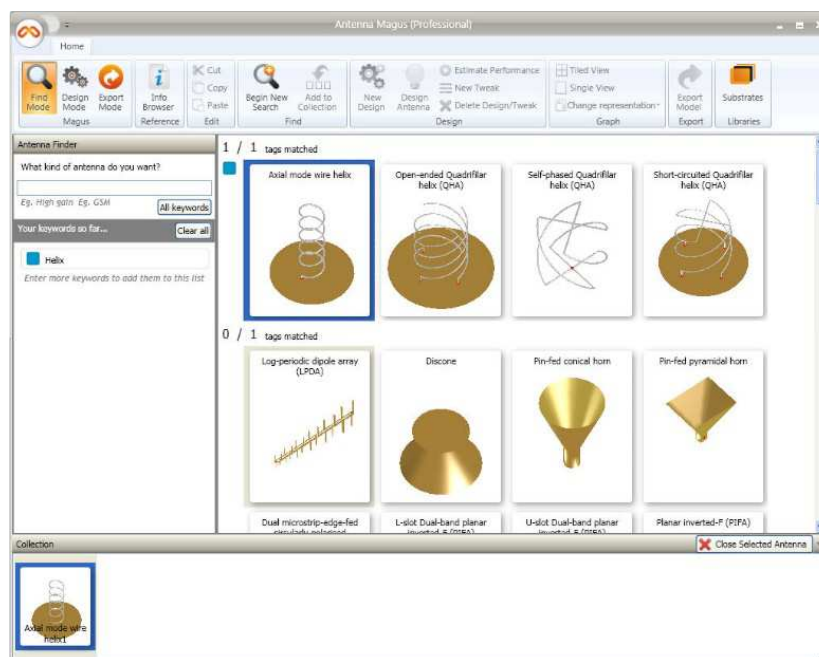


Fig. 1. Cover Page of software package Antenna Magus

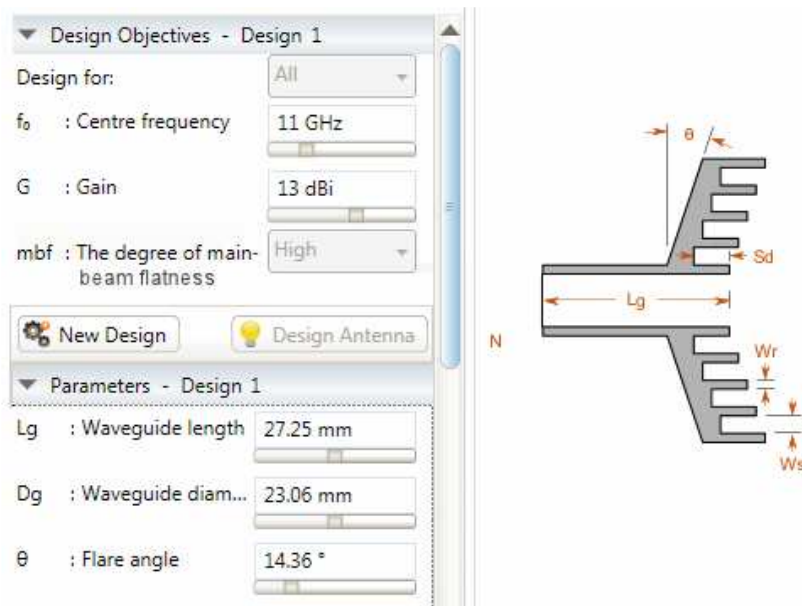


Fig. 2. Changing the antenna simulated in software package Antenna Magus

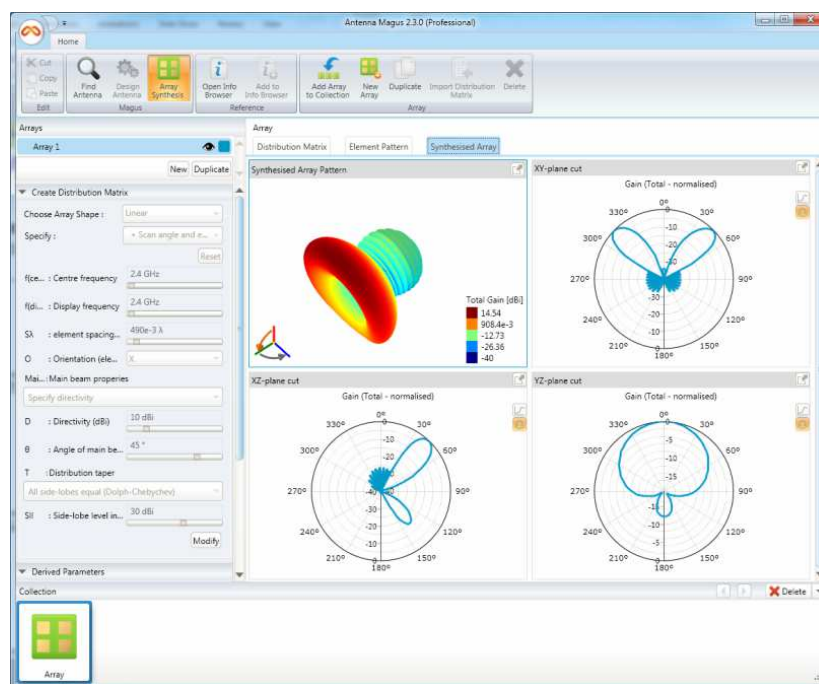


Fig. 3. The parameters of the simulated antenna

Despite the fact that the dielectric rod antennas available set of embodiments, in most cases, they are tapered rod of round or rectangular cross section. This feeder waveguide excites the part of the input power in the form of surface waves propagating along the rod with minimal reflection. The resulting wave begins to continuously emit gradually being transformed from a limited to a wave in free space. Antenna Magus also added a number of practical models of broadband planar spiral antenna with an additional absorbing layer. The layers of absorbent material are used to produce unidirectional emission, while maintaining many of the working octave range spiral emitters.

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