Design More, Faster.

VirAntenn™ is a computer-aided design (CAD) software tool used to compute radiation and scattering from arbitrary structures. With it, you can predict the performance of antennas and the radar cross-section of targets in both military and civilian applications.

Rapid and accurate antenna design and scattering analysis

Proven accuracy, reliability, and effectiveness.

VirAntenn™ was developed under contracts with the U.S. Navy and the Missile Defense Agency, tested by prime contractors, and validated against measured radiation and scattering data.

Reduced time-to-market, lowered costs, & improved quality.

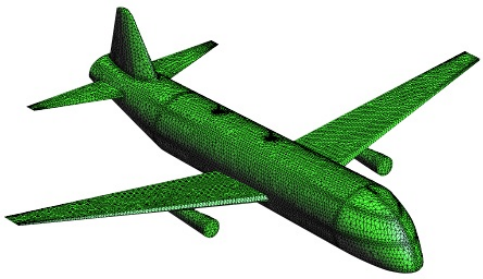
For the given accuracy, the computational engine of VirAntenn™ is 3x faster than that of any other comparable product, reducing both time-to- market and the cost of development. What's more, VirAntenn™ can compute as many as 28 million unknowns on a single PC, and the system supports CAD import/export in 15 standard formats.

Low or no upfront investment.

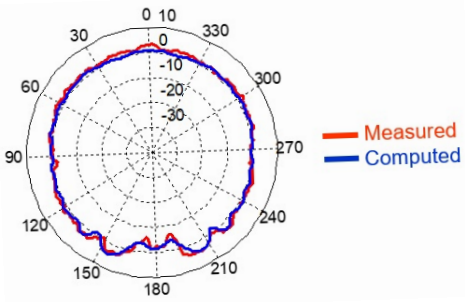
VirAntenn™ uses standard CAD I/O so there's no need to invest valuable resources in a proprietary system. Further, you can take advantage of the pay-per-use option, which allows you to access VirAntenn™ on a secure cloud with no investment (see the rate card for additional details).

VirAntenn™

Accelerated Antenna Design Software



- Boeing 737 with two blade antennas readied for co-site analysis



- V-polarized gain pattern of one of the blade antennas (computed values are within 1dB of the measured counter-parts)

For more information, contact Virtual EM, Inc., at 734-222-4558 or sales@virtualem.com.

VirAntenn™

Accelerated Antenna Design Software

- Robust and versatile finite element-boundary integral (FE-BI) engine
- Algorithmic acceleration through fast multipole method (FMM) and fast fourier transform (FFT)
- Hardware acceleration through graphics processing units (GPUs) and multi-core central processing units (CPUs)
- Printed and arbitrary 3-D geometries with material variations
- 3-D CAD interface
- Computation of both VSWR and radiation properties for single radiators and S-parameters for multiple antennas for co-site analysis, or for RF circuits
- Radar cross-section (RCS) modeling of arbitrary 3-D targets

Free Trial

Learn what the U.S. Navy already knows:

For a limited time, download a 90-day fully-functional trial copy of VirAntenn™ for free at www.virantenn.com/trial.

ITAR Restricted Product: Users must be U.S. Persons or must have ITAR license.

VIRTUAL EM

Founded in 2002, Virtual EM is a privately held R&D house with a mission to develop disruptive technologies for defense and civilian markets. With R&D funding from government and commercial sources, Virtual EM has developed prototypes ranging from software for electromagnetic modeling to hardware for wireless sensor networks. Virtual EM strives to create a nurturing and rewarding environment for its employees and maintains close relationships with its industry and academic partners. Virtual EM's business model calls for licensing or spinning off its mature technologies in partnership with OEMs or outside investors, respectively. VirAntenn™ is Virtual EM's first commercial product, and the company has recently signed a comprehensive licensing agreement with an OEM to commercialize its embedded wireless technologies.

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