

coulomb*

3D Electrostatic Design Software

Integrated Engineering Software presents COULOMB, a powerful three-dimensional electrostatic design and analysis tool featuring our innovative Boundary Element Method (BEM) technology. COULOMB is especially well suited for applications where the design requires a large open field analysis and exact modeling of the boundaries. COULOMB combines exceptional ease of use, speed and accuracy all in one fully-integrated package.

Design engineers depend on COULOMB for the design and analysis of electric/electronic equipment and components such as:

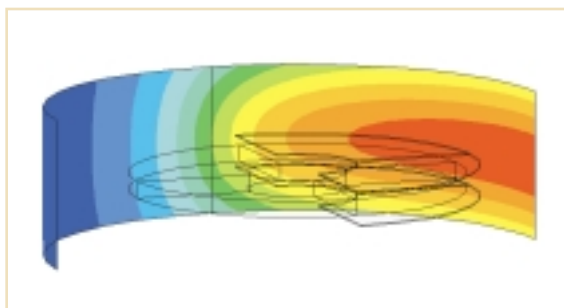
- insulators, bushings, grounding electrodes
- microelectromechanical systems (MEMS)
- high voltage shields
- power transmission lines
- telecommunication cables
- lenses for beam deflection
- microstrip and integrated circuits
- parts and assemblies subject to electrical fields



Capacitive position sensor



Voltage contour plot of high voltage insulator



Contour plot of E field at 1cm from sensor

"COULOMB has proven to be very useful for electrostatic modelling of biological systems. Integrated has impressed me with their willingness to work with the customer to solve unique problems."

*John Hauck
Principal Research Scientist
Endocardial Solutions
Minnesota, USA*

Speed, accuracy...
plus reduced costs

COULOMB maximizes productivity by allowing for the simulation of virtual prototypes on the computer. COULOMB significantly reduces design and prototype costs and provides engineers far greater insight into design optimization and verification.



INTEGRATED
ENGINEERING SOFTWARE

www.integratedsoft.com

coulomb at a glance

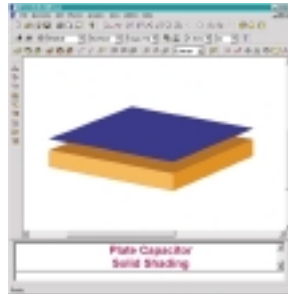
- 3D Electrostatic/Quasi-static field solver for a diverse range of applications
- Powerful Windows® native toolbar interface for easy data and geometry manipulation
- A wide array of post processing options for design evaluation and verification
- Industry standard CAD import/export utilities offering time saving convenience for model design and creation
- Comprehensive technical support services from the best in the industry

As easy as
one, two, three

COULOMB provides fast accurate results, exact modeling of boundaries and easy analysis of open region problems. No Finite Element Mesh (FEM) is required. COULOMB delivers an easy to use, powerful electrostatic analysis tool right to your desktop.

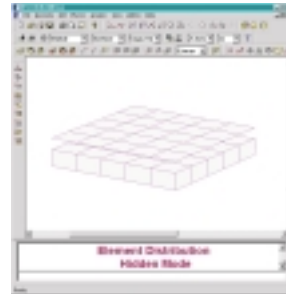
COULOMB goes to work in just three easy steps.

Step 1



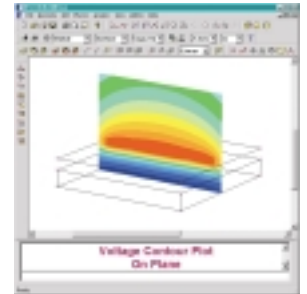
Create your design through our geometric modeler or import from your CAD program.

Step 2



Assign the physical attributes of the model.

Step 3



Analyze the model, display the results and optimize for performance.

COULOMB'S advanced technical features

- Intuitive and structured tool-bar interface maximizes productivity for experts and beginners alike
- Static and phasor analysis modes
- Static electric field and electrical conduction analysis and quasi-static analysis of lossy dielectrics
- Ability to assign constant or non-uniform charge distributions to surfaces
- Electrostatic force and torque and capacitance calculations
- A variety of display forms for plotting scalar and vector field quantities including, graphs, contour plots, arrow plots, color maps, streamline plots and vector loci plots
- High quality graphics and text utility for preparation of reports and presentations
- Data exportable to formatted files for integration with spreadsheets and other software packages
- Batch functions allows unattended solution of multiple files
- Powerful parametric feature allows definition of variable parameters to be stepped through allowing the analysis of multiple "what-if" scenarios and facilitating design optimization

Try COULOMB
for 30 days!

Discover how easy COULOMB is to learn and use. All full version software is available for a 30-day evaluation. Verify and compare the results. Call for a COULOMB evaluation and start improving productivity today.

(COULOMB)*



INTEGRATED
ENGINEERING SOFTWARE

220 - 1821 Wellington Avenue, Winnipeg, Manitoba, Canada R3H 0G4
Tel: (204) 632-5636 Fax: (204) 633-7780 E-mail: info@integratedsoft.com
www.integratedsoft.com