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Ansys Lumerical FDTD

Simulation of Photonic Components

Ansys Lumerical FDTD is the gold-standard for modeling nanophotonic devices, processes, and materials. The integrated design environment provides scripting capability, advanced post-processing, and optimization routines.



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ANSYS LUMERICAL FDTD

Lumerical FDTD: Reliable, Powerful and Scalable Solver Performance

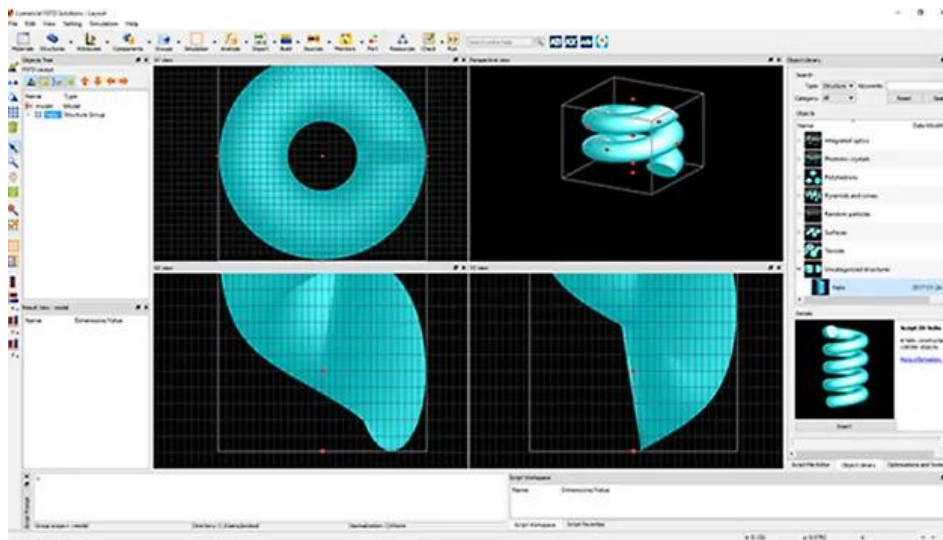
This finely tuned implementation of the FDTD method delivers best-in-class solver performance over a broad spectrum of applications. The integrated design environment provides scripting capability, advanced post-processing and optimization routines, allowing you to focus on your design and leave the rest to us.

✓ 3D CAD Environment

✓ Accurate Material Modeling

✓ Nonlinearity and Anisotropy

✓ Powerful Post-processing





Quick Specs

A range of benefits allow for flexible and customizable models and simulations. Ansys Lumerical FDTD models nanophotonic devices, processes and materials so you can focus on creation.

2D or 3D Models

Advanced Conformal Meshing

Flexible Material Plug-ins

Fully vectorial custom and high NA broadband beam sources

Custom Surfaces and Volumes

Cloud and HPC Capability

Far-field Projection Analysis

Q-factor Analysis

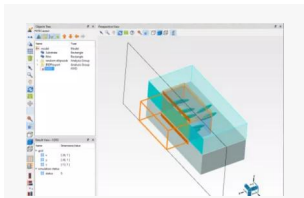
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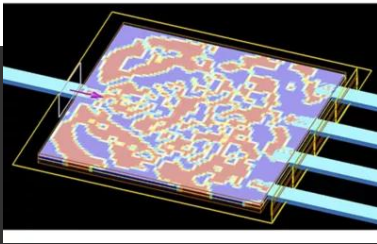
What's New

The 2023 R1 release brings a new modernized GUI to Ansys Lumerical FDTD.



New GUI in Ansys Lumerical FDTD

New 3D modern view with clipping planes and Nav Cube for easy 3D orientation.



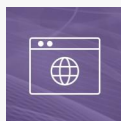
ANSYS LUMERICAL FDTD

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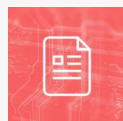
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Ansys Lumerical's Component Level Tools

This webinar starts with an overview of the broad set of component level solvers it offers with an emphasis on FDTD and MODE. It then shows how these solvers can be used to simulate and optimize novel designs in a wide range of applications including micro-LEDs, augmented reality, magneto-optics and lasers.

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Lumerical's Photonic Inverse Design reduces CompoundTek SiPh grating coupler footprint by 20x

Using Lumerical's PID flow on AWS EC2, new SiPh grating couplers were developed with a footprint 20x smaller than CompoundTek's existing coupler and with predicted improvements in performance.

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Ansys software is accessible

It's vital to Ansys that all users, including those with disabilities, can access our products. As such, we endeavor to follow accessibility requirements based on the US Access Board (Section 508), Web Content Accessibility Guidelines (WCAG), and the current format of the Voluntary Product Accessibility Template (VPAT).

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