

VPIphotonics Announces VPIdeviceDesigner Version 2.8

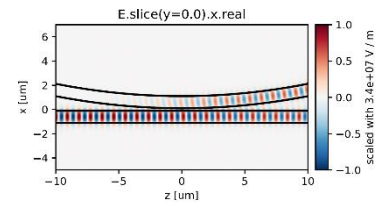
New GDS Import/Export Functionality and Advanced BPM Capabilities

Berlin, Germany – [VPIdeviceDesigner version 2.8](#) is now available for immediate upgrade.

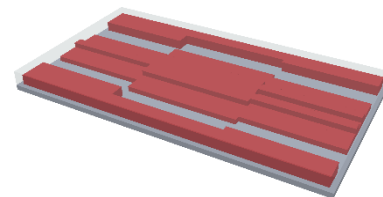
VPIphotonics is proud to announce the release of [VPIdeviceDesigner](#) version 2.8, a versatile simulation framework for the analysis and optimization of optical devices, waveguides, and fibers, emphasizing integrated photonics applications. This powerful design tool offers 2D and 3D full-vectorial finite-difference beam propagation and eigenmode expansion solvers for modeling optical devices. Additionally, it includes a set of full-vectorial and semi-vectorial finite-difference mode solvers for modeling straight and bent waveguides and fibers made of isotropic and anisotropic (including plasmonic and gyrotropic) materials.

While leveraging its user-friendly object-oriented Python interface with full access to SciPy, NumPy, and other Python packages for science, engineering, and data analysis, VPIdeviceDesigner version 2.8 offers many new features and additional functionality, such as:

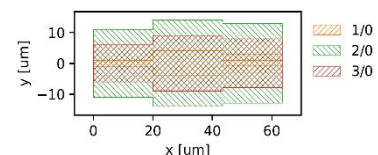
- New Import and Export Functionality for GDS Layouts
- New and Upgraded Mode Solvers
- Improved Accuracy of BPM S-Parameter Calculations
- New Semi-Vectorial BPM Simulations
- BPM S-Matrix Calculations with Rotated and Bent Ports Enabling Ring Coupler Applications
- New Mode Properties and Custom Mode Properties Facilitating, for Example, Second Harmonic Generation Efficiency Analysis in PPLN Applications



Ring Coupler Application Using BPM S-Matrix Calculations.



3D Layout Imported From GDS.



Example of 2D GDS Layout.

Version 2.8 significantly improves photonic device and waveguide simulation capabilities. New application examples include:

- Second Harmonic Generation Efficiency in PPLN
- Ring Coupler with BPM
- GDS Import and Export 1×2 MMI
- Geometry Parameter Sweeps on GDS-Imported Layouts
- Visualizing Dispersion and Polarization of Hybrid Modes

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About VPIphotonics

VPIphotonics sets the industry standard for end-to-end photonic design automation comprising design, analysis and optimization of devices, components, systems and networks. We provide professional simulation software supporting applications in optoelectronics, integrated photonics, fiber optics, optical transmission systems and networks. Our experts offer professional consulting services and training courses on modeling techniques and software capabilities. For more than 25 years, VPIphotonics' award-winning solutions have been used extensively in research and development and by product design and marketing teams at hundreds of corporations worldwide. Over 160 academic institutions joined our University Program, enabling students, educators, and researchers easy access to VPIphotonics' latest modeling and design innovations. **More information is available at www.VPIphotonics.com.**