

SolidWorks Electrical 3D	
	Feature
1	<b>Collaborative Electrical-Mechanical Development</b>
	SOLIDWORKS Electrical 3D addresses the needs of multi-user and cross disciplinary projects with a synchronized design environment between the electrical and mechanical teams to readily implement schematically defined electrical systems into a SOLIDWORKS 3D CAD model. Multiple electrical and mechanical engineers can work on the same project simultaneously in real time using SOLIDWORKS Electrical 3D's advanced database technology with its bi-directional, multi-user environment.
2	<b>Real-time Synchronization</b>
	SOLIDWORKS Electrical synchronizes all project design data in real time, bi-directionally in a multi-user collaborative environment between 2D schematics and the 3D model. This synchronization unifies key information (such as Bill of Material and design data) between design disciplines and users. Automated synchronization is standard when using any SOLIDWORKS Electrical package—Electrical Schematic, Electrical 3D™, or Electrical Professional.
3	<b>Electrical Design in 3D CAD</b>
	Designers and engineers can integrate electrical schematic design data from SOLIDWORKS Electrical 3D into a SOLIDWORKS 3D CAD model for CAD-embedded, electrical system design. This real-time, bi-directional, multi-user tool enables more collaborative design between electrical and mechanical designers and allows for placement or removal of electrical components in the 3D CAD model. Easily create the electrical interconnect of the electrical 3D elements with auto-routing that allows for the planning and documentation of route paths and associated data (such as length of wires, cables, and harnesses within the system).
4	<b>Auto-Routing</b>
	Advanced SOLIDWORKS routing technology to simplify the auto-routing process for wire, cables, and harness in the 3D CAD model.
5	<b>Electrical Harness Design Planning</b>
	SOLIDWORKS Electrical 3D creates a virtual “design-in-place” electrical system development environment that provides auto-routing of a schematically-defined electrical harness in a SOLIDWORKS 3D CAD model, which simplifies harness development while eliminating errors. Once the virtual harness has been created, SOLIDWORKS Electrical 3D can produce detailed assembly drawings using the built-in drawing tools. These drawing creation tools include capabilities to create ballooned assemblies, pin board or cut list drawings, as well as associated BOM documentation.
6	<b>Embedded Electrical System Design Planning</b>
	SOLIDWORKS Electrical 3D is an easy-to-use planning tool for rapid collaborative design of schematically-defined embedded electrical systems that can be implemented in a SOLIDWORKS 3D CAD model with an intuitive graphical user interface and the intelligence of traditional multi-line tools. SOLIDWORKS Electrical 3D creates a new technology paradigm, incorporating purpose-built design tools for schematically-driven embedded electrical subsystem development.
7	<b>3D Electrical Cabinet Design</b>
	Combining SOLIDWORKS CAD and Electrical technologies, SOLIDWORKS Electrical 3D provides a design environment enhanced for electrical 3D cabinet design. This cohesive environment is synchronized in real time without the use of external files and can utilize existing CAD designs. With SOLIDWORKS automation tools, SOLIDWORKS Electrical 3D provides comprehensive electrical 3D cabinet design and documentation capabilities.
8	<b>Electrical Component Library</b>
	An extensive integrated library of manufacturer parts provides an easily customizable and adaptable parts base through easy-to-use import tools and wizards.