

SolidWorks Electrical 2D Schematics

	Feature	SOLIDWORKS Electrical Schematics Standard	SOLIDWORKS Electrical Schematics Professional
1	Single-line Schematics	✓	✓
	Planning tool for creating complex embedded electrical systems utilizing simple pictorial representations of electrical components.		
2	Multi-line Schematics	✓	✓
	Schematic creation tool with a simple user interface optimized to help ease repetitive tasks.		
3	Mixed Schematic	✓	✓
	Combine both single-line and multiline drawings on the same schematic, while keeping them connected.		
4	2D Cabinet Creation	✓	✓
	Generate 2D panel drawings from an electrical schematic, with 2D outlines of electrical components.		
5	Electrical Component and Symbol Library	✓	✓
	Extensive library of industry-standard schematic symbols (IEC, ANSI, JIS, GB) combined with a database of manufacturer parts to provide an easily customizable and adaptable parts database through easy-to-use import tools.		
6	Design and Reuse	✓	✓
	Suite of integrated tools enables intelligent cut and paste, easy access to a selection of "favorite" components and circuit design elements, and reuse of non-SOLIDWORKS electrical design elements through easy-to-use import wizards.		
7	Automated Terminal Drawing Creation	✓	✓
	Automatically generate terminal drawings from real-time design.		
8	Automated Contact Cross-Referencing	✓	✓
	Electrical contacts are automatically cross-referenced in real time and synchronized based on availability and type of contacts from manufacturer-specific components.		
9	Advanced Formula Manager	✓	✓
	Enhanced formula capabilities for custom naming everything from wires to projects.		

10	SOLIDWORKS Electrical Content Portal	✓	✓
	Web-based content portal provides access to an extensive library of manufacturer parts.		
11	Link to SOLIDWORKS Electrical PDM Connector	✓	✓
	Enhanced PDM interface provides electrical and mechanical data management in one system based on proven SOLIDWORKS PDM capabilities.		
12	Report Generation	✓	✓
	Automatically generate standard reports based on real-time design database queries.		
13	Report Generation - Customized		✓
	Customize the look and content of your reports. Use the integrated SQL editor to display any data from your designs including writing custom Design Rule Checks.		
14	Link to SOLIDWORKS 3D CAD		✓
	SOLIDWORKS Electrical Schematics Professional (with the purchase of SOLIDWORKS Electrical 3D) links the schematic to 3D SOLIDWORKS assemblies. This facilitates verification of proper fit of components; planning for the paths and space needs of all wire, cable, and harness routes; and calculation of all wire lengths prior to any assembly.		
15	Common ECAD and MCAD Database		✓
	SOLIDWORKS Electrical Schematics Professional is bidirectionally linked with the 3D design (with the purchase of SOLIDWORKS Electrical 3D) which allows multiuser collaboration in real time between ECAD and MCAD engineers. Sharing a common database ensures consistency and facilitates the creation of a complete BOM.		
16	PLC Tools		✓
	The Programmable Logic Controller (PLC) management tools automate many PLC wiring design tasks, along with the ability to import PLC data and labels.		
17	Dynamic Connector Tools		✓
	Powerful, easy-to-use connector wizard helps simplify the creation, design, and use of electrical connectors including tracking which pins are used.		

18	Real-time Collaboration		✓
	Synchronized, bi-directional environment enables multiple users to work on the same schematics project simultaneously for easier project collaboration.		
19	Real-time Synchronization		✓
	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 Materials (BOM) and design data) between design disciplines and users.		
20	Deferred Update Mode		✓
	Enhances schematic performance by minimizing network traffic and deferring real-time project updates. This technology provides a performance boost for large projects and users who work remotely.		
21	Custom Part Library Classification		✓
	Create new folders with custom titles to tailor the parts library.		
22	Excel Automation		✓
	Automate aspects of the schematic creation by using Microsoft Excel.		
23	User Rights Management		✓
	Enable different levels of access control to various functionality.		