



CAD Software for Electrical Design

Autodesk® AutoCAD® Electrical is AutoCAD® software for controls designers, purpose-built to accelerate the creation of electrical control systems by automating control engineering tasks and providing comprehensive symbol libraries.

- Circuit design and reuse
- Electrical schematic symbol libraries
- Real-time error checking
- Improved user experience
- PLC I/O drawings from spreadsheets
- Standards-based libraries
- Smart electrical panel layout drawings
- Terminal Strip Editor
- Terminal Strip import/export
- Automatic wire numbering and component tagging
- Improved capabilities with wires
- Catalog Browser previews and inserts parts
- Edit parts in Catalog Browser
- Inventor interoperability Seamless mechatronics solution combined with Inventor.
- Panel layout drawings Extract a list of electrical schematic components for panel layout drawings.
- Automatic report generation Run multiple reports with the simple, customizable report generation tool.
- Automatic report generation
- Customer and supplier collaboration
- File and project organization
- Flexible drag-and-drop file organization
- PDF publishing
- Marking Menus for shorter edit times

AutoCAD® Electrical, part of the Autodesk solution for Digital Prototyping, is AutoCAD® software for controls designers, purpose-built to create and modify electrical control systems. It contains all the functionality of AutoCAD, plus a comprehensive set of tools for automating control engineering tasks, such as building circuits, numbering wires, and creating bills of material. AutoCAD Electrical provides a library of more than 700,000 electrical symbols and components, includes real-time error checking, and enables electrical and mechanical teams to collaborate on digital prototypes built with Autodesk® Inventor® software. AutoCAD Electrical offers control engineers a competitive edge by helping save hours of effort, so they can spend more time innovating.

The logical choice for electrical controls design

Autodesk® AutoCAD® Electrical 2015 software helps controls designers to create and modify electrical control systems. Automated tasks and comprehensive symbol libraries help to increase productivity, reduce errors, and provide accurate information to the manufacturing floor. Stay ahead of the competition with AutoCAD Electrical software which, with added tools on top of Autodesk® AutoCAD® software, offers significant productivity gains by automating many of the complex tasks associated with creating accurate, industry-standard electrical control systems.

Increase productivity

When engineers create electrical control systems using software not specifically built for electrical design tasks, they must often find manual workarounds to get the job done—wasting valuable design time and limiting productivity. Since AutoCAD Electrical software is AutoCAD for controls designers, it contains many features and benefits that help users to dramatically increase design efficiency, while maintaining a smooth integration with the familiar AutoCAD environment. A recent study shows an up to 80 percent increase in productivity when moving to AutoCAD Electrical from AutoCAD.*

Reduce errors and comply with industry standards

As engineers create electrical controls designs using generic tools, it is easy to introduce errors and design inconsistencies. The ability to virtually eliminate errors before they reach the shop floor can provide a distinct competitive advantage. AutoCAD Electrical includes automatic errorchecking capabilities that help designers perform real-time diagnostics to catch problems before the build phase of a project. In addition to reducing errors, AutoCAD Electrical helps companies compete in the global marketplace by offering support for regional and international standards. With more than 350,000 components from the industry's most popular vendors—including more than 3,000 intelligent PLC I/O modules—AutoCAD Electrical provides a comprehensive library of manufacturer content, enabling users to produce consistent, standards based designs.

Manage design data

Once the design is complete, it is important to share accurate design and part information with manufacturing. Creating crucial parts lists, BOMs, and from/to wire lists using software that is not built specifically for these tasks can waste valuable time and resources. AutoCAD Electrical includes robust automated reporting tools so the design data being shared with downstream users is current. In addition, AutoCAD Electrical is tightly integrated with Autodesk® Vault, which enables the efficient and secure exchange of design data and promotes earlier collaboration between design and manufacturing workgroups.

Facilitate collaboration

AutoCAD Electrical enables both electrical and mechanical teams to work collaboratively by making it easy to share the electrical design intent for cables and conductors directly with team members using Autodesk® Inventor® software, adding valuable electrical controls design data to the digital prototype. Users also can publish DWF™ files directly from AutoCAD Electrical and collaborate on 2D and 3D designs with customers, suppliers, and others outside the group. Different workgroups can manage and track all components of a digital prototype with Autodesk® Design Review software—the all-digital way to review, measure, mark up, and track changes to designs—enabling better reuse of critical design data, management of BOMs, and collaboration with other teams and partners.

Desktop Subscription gives you access to the latest updates and releases, 1-on-1 web support, priority support in the forums, flexible licensing, and more.