

Volts' Features and Benefits

VOLTS™ electrical design software is a comprehensive suite of integrated modules that produces fast, accurate designs. All computations are compliant with IEEE 141, 241, 242 and NEC® standards.

VOLTS™ computing engine dynamically displays voltage drop and actual real power values and many user defined variables which are updated with every addition or modification to the software.

Features and Benefits

- By using VOLTS™, you will gain control over the electrical design process and make your business more efficient, productive and profitable.
- Your learning curve is minimized by VOLTS™ Easy to Use Data Entry - Intuitive Interface - drop down lists with standardized industry data. This comprehensive interface facilitates fundamental computations to highly specific and defined analysis.
- Your electrical engineer's efficiency will be dramatically increased by automating repetitive and time-consuming tasks associated with the electrical design process.
- VOLTS™ software enables you to standardize your company's electrical design process across all projects.
- You will be able to communicate and manage design data more effectively.
- The power of automating the tedious task of creating One-Line Riser Diagrams, Panel Schedules, Feeder Schedules, Load Summaries, user defined reports, etc. saves you precious time with VOLTS™ electrical design software.
- In comparison to the manual design process, VOLTS™ electrical design software minimizes or eliminates frustrating errors.
- VOLTS™ increases design productivity and supporting documentation quality.
- Your ability to accommodate the dynamics of the electrical design process by interactively adding, deleting or modifying branch circuit devices and/or conductors & cables is significantly improved with VOLTS™ software.
- VOLTS™ features over 300 supported IEEE and NEC® tables, specifications and requirements.
- You will quickly copy & paste Panel Schedules, Feeder Schedules, NEC® 220 Load Summary, and other electrical design data from our MS Excel® export feature.
- Most reports are exportable to AutoCAD®, Visio®, Turbo CAD®, and other programs from our CAD DXF export format.
- We care about your experience as a VOLTS™ user and develop enhancements based on client feedback.

Computing - Integrated Modules

[Branch Circuit Load Calculations](#) [Motor Startup Amperage](#)

[Unit Conversions](#)

[Cable Tray Fill](#)

[Ohm's Law](#)

[User Defined Defaults](#)

[Circuit Load Analysis](#)

[Power Factor](#)

[NEC® Specification Pages](#)

[Conduit Fill](#)

[Power Factor Correction](#)

[NEC® Usage Examples](#)

[Device and Metal Box Fill](#)

[PF and Phase Angle Offset](#)

[Utility Transformer Values](#)

[Efficiency Factor](#)

[Resistor Color Codes](#)

[Wireway Fill](#)

Junction, Pull Box & Conduit
Body Fill

[Series Voltage Drop](#)

[Motor Ampacity and
Characteristics](#)

[Transformer Sizing](#)

Databases - All Active

[Cables Database](#)

[Device and Metal Boxes
Database](#)

Raceways Database

Cables Compound Reference

[Fuses Database](#)

Transformers Database

[Circuit Breakers Database](#)

[Items Database](#)

Wireways Database

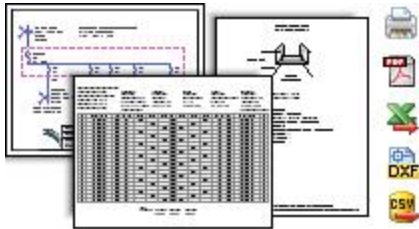
[Conductors and Insulations](#)

Junction and Pull Boxes
Database

Conduit Bodies Database

Labels Database

Reporting



Volts' accurate and diverse computing is complemented by a complete array of comprehensive reports capable of printing, exporting to PDF, exporting to MS Excel® and exporting to CAD DXF. Additionally, some reports are exportable to a csv (comma separated values) for database inclusion.

Standard Reports

[View a partial list of Volts' reports in PDF format.](#)

Functionality

[Arc Flash Analysis w/Labeling](#)

[Short Circuit Analysis](#)

[Circuit Layout](#)

[Surge Protection Analysis](#)

[One Line Riser Diagrams](#)

[Voltage Drop Formulae](#)

[Panel Schedules](#)

Demonstrations

[Help Movies - How to Do's](#) These are audio/visual help movies

[Volts Informative Brochure and Volts Presentation Downloads](#)

Formulae in PDF formats -

[IEEE Exact Voltage Drop
Formulae](#)

[Conductor Sizes](#)

[Ohm's Law with Power and Impedance](#)

[SI Units](#)

Step-By-Step Instruction Manual and Book

**Electrical System Design and Application using Volts
by American Technical Publishers**

Electrical System Design and Application covers the fundamentals of electrical distribution system design by applying Volts™ using a clear, easy-to-follow, step by step approach. The text focuses on the most common Volts™ commands and command options to help the user become more productive quickly. *Electrical System Design and Application* is designed to address concepts required to efficiently create electrical distribution systems using Volts'™ powerful and accurate circuit load analysis module.

