PowerCad™ brings you innovative electrical design software through ongoing research and development

PowerCad Software – established in 1991, with its affiliated companies being part of the building industry for the past 25 years – offers a range of electrical design software and support services that are second to none in the industry.

Our continued commitment to research and development results in innovative design software solutions for the building services industry.

PowerCad Software Products are specifically created for the building electrical services industry. Our software models residential, institutional, IT– buildings, government, commercial and industrial buildings.

PowerCad Electrical Design software product range offers solutions for the Electrical Contractor through to the Consulting Electrical Design Engineer. From QuickCable-LT™, QuickCable™, PowerCalc™, PowerCalc-H™ to PowerCad-5™.

Quality, Service and Support
At PowerCad we believe in offering our customers quality leading edge innovative design software, backed by efficient service and informative support from qualified experienced engineers.

PowerCad-5™ Features

- Cable Voltage Drop Calculations
- Time/Current Co-ordination Curves
- Co-ordination Curve On Screen CB OCR Adjustment (dynamic)
- User Defined Time/ Current Co-ordination Curves
- Selectivity/Cascading
- Maximum Demand
- Cable Thermal Stress
- Let Through Energy
- Cable Sizing
- Conduit Sizing
- Fault-loop Impedance
- Fault Level Calculations
- ARC Fault Check
- Circuit Breaker Selection
- Single Line Diagram
- Harmonic Mitigation
- Power Factor Correction
- Harmonic Analysis
- Network Resonance
- Substation Sizing
- Standby Generator Sizing
- Active Harmonic Filter Sizing
- Passive Harmonic Filter Sizing
- Single Line Diagram Export to AutoCAD®
- L.V. Distribution Network Modelling
- AutoCAD® Interface for Loads Input
- Automatic Mains and Submains Cable Selections
- Automatic Final Subcircuit Cable Sizing
- Display Load Starting Current Profile
- Light Fitting and Motor Libraries
- Reports with Print Preview
- Direct Online Support
- Standards AS/NZS, IEE, BS, CP5 and IS (India)

POWERCAD™

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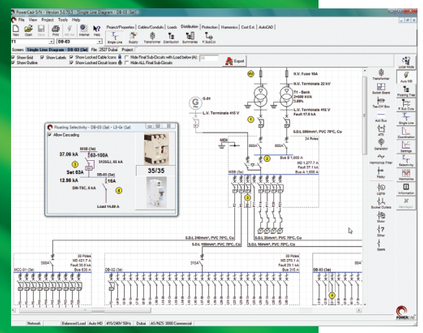
PRODUCED FOR EXPORT

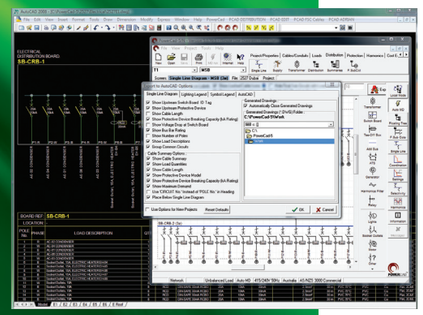
leaders in innovative electrical engineering design software

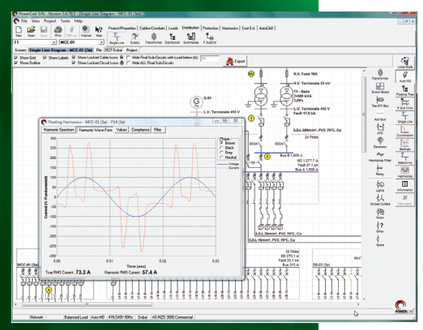
POWERCAD-5™

PowerCad-5™ The optimum electrical engineering design solution for Consulting Engineers

PowerCad™ presents PowerCad-5







PowerCad-5™ embraces the complete electrical design capabilities of PowerCalc-H™, including harmonic modelling, single line diagram and time/current co-ordination curves, then interfaces with AutoCAD® to enable the electrical engineer to input connected loads data direct from the project electrical design drawings.

Single Line Diagram

PowerCad-5 dynamically builds a single line diagram for the project's L.V. distribution, including substation, mains and submains cables, circuit breakers and all final subcircuits.
A "fly-over" display provides instant information for any device, cable or load in the L.V. distribution from the single line diagram.

Single Line Diagram - AutoCAD® Export

A powerful PowerCad-5/AutoCAD® dynamic link transports the L.V. distribution single line diagram directly into AutoCAD® and dynamically updates the diagram as changes are made in PowerCad-5.

Harmonic Analysis

PowerCad-5 contains a powerful harmonic module. Loads with a harmonic profile (up to the 50th order) can be added to any switchboard in the L.V distribution network. The harmonic profile for each load is added automatically throughout the network. PowerCad-5 sizes the neutral and active conductors based on the harmonic load profile at each point in the network.

Harmonic Mitigation

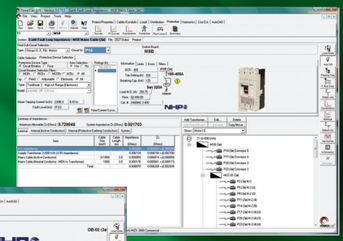
Harmonic filters (requires manufacturer's data) can be connected to the network. PowerCad-5 displays the compensated harmonic load profile and automatically reselects all cables throughout the network based on the compensated load.

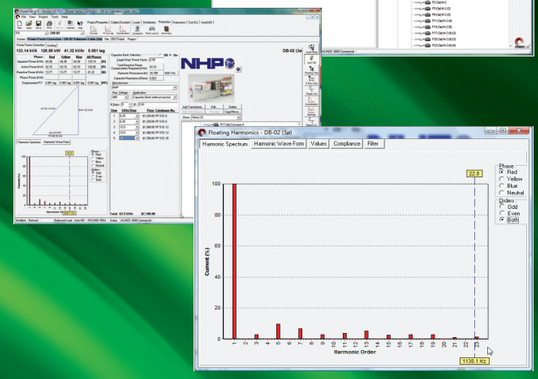
Input from Harmonic Analyser

Harmonic analyser readings for equipment can be displayed in PowerCad-5, dynamically reviewed, then stored as data for future use in the PowerCad-5 "user" equipment library.

POWERCAD-5™

The unique AutoCAD® interface streamlines the design process from start to finish





Fault-loop Impedance

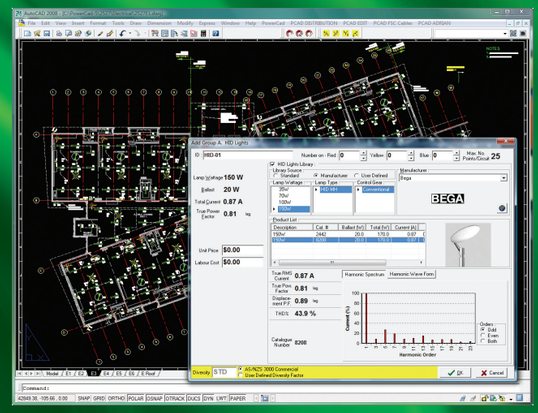
PowerCad-5 based on the substation, circuit breaker and cable selections throughout the L.V. distribution network automatically calculates and checks the fault-loop impedance

Power Factor Correction

PowerCad-5 allows the addition of capacitor correction at any switchboard in the L.V. distribution. On adding the capacitor bank PowerCad-5 automatically selects the protective circuit breaker and associated cable.

Network Resonance

When adding a capacitor bank to the L.V. distribution, PowerCad-5 dynamically superimposes the network resonance frequency on the harmonic spectrum display. Providing a visual indication of possible resonance problems as a result of adding the capacitor bank.

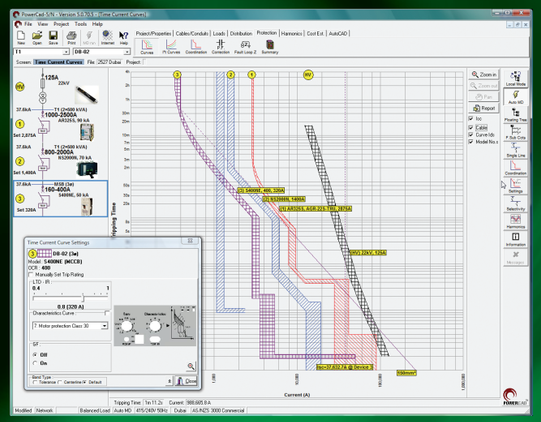


Socket Outlets

Appliances, (ie computer, screens etc.) when connected to socket outlets manually or from within AutoCAD® enables harmonic analysis of their effect on the L.V. distribution.

Time/Current Co-ordination Curves

PowerCad-5 displays the time/current co-ordination curves for all protective devices in the L.V. distribution network including a superimposed damage curve for the protected cable.



AutoCAD® Interface

PowerCad-5 interfaces with AutoCAD® to obtain the L.V. distribution loads (ie light fittings, socket outlets, motors etc.), then automatically models the L.V. distribution calculating the maximum demand, sizing the substation, mains cable, submains cables, all final subcircuit cables and selects all protective devices.