

## DDS-CAD Electrical

### Electrical Installation

- Complete 2D and 3D installation plans
- Planning cable trunks, ladders and conduits
- Alarm systems, data network intercom, phone, antenna etc
- Bus systems (EIB/KNX)
- Integrated generic product database (2D and 3D)
- Possibility to create own products to use with the system
- Automatic cable and voltage drop calculations
- Integrated light calculations and 2-way link with Dialux/Relux
- Dimensioning cables and protective devices based on load
- Automatic cable and equipment texting
- All drawings and diagrams from one data model
- Update of all documents when changing the model
- Intelligent electric circuit choice
- Intelligent electrical installation BIM design tools
- Very efficient in production of old fashion drawings (DXF/DWG)

### Electrical Automation

- Entry of circuit lists
- Automatic generation of single line and multiple line diagrams
- Automatic generation of cable/terminal list and control circuit ands
- Automatic numbering of terminal blocks
- Automatic component numbering
- Automatic integration with installation drawings
- Automatic update across whole project
- Switch board layout design

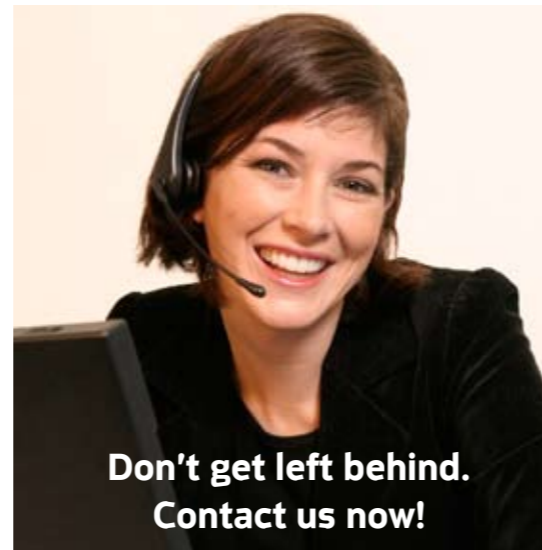
### DDS-CAD building platform

- Intelligent BIM/CAD core made by DDS
- Building object database with walls, windows, doors, slabs, roof etc.
- Layout and planning in 2D and 3D
- Immediate BIM when importing IFC models from architect software
- Efficient creation of BIM from 2D DWG/DXF/bitmap architect import
- U-value and heat loss calculation according to EN 1264
- Building simulations and calculations (i.e. energy)
- Configurable and automatic space labeling
- Automatic and associative dimensioning
- Multidisciplinary collision detection
- Intelligent and automatic ceiling grid construction
- Automatic and manual layer assignment (unlimited)
- 3D visualization and rendering
- Production of escape route plans
- Production of fire-brigade plans
- Interface to 3rd party energy calculation and simulation tools
- Various export formats (IFC, DWG/DXF, SVF, 3DS, VRML, PDF etc.)
- Interface to/integration with costing and estimating
- Network ready with multi user access at project level
- Structured Bills of Quantity (BOQ) by building, storey, room



**buildingSMART/IFC Certification**  
DDS-CAD products have been certified by the International Alliance for Interoperability (IAI) Implementation Support Group as having an approved import and export facility for IFC versions 2x, 2x2 and 2x3.

**System requirements**  
DDS-CAD 6.4 will run comfortably on a standard Office PC running Windows XP® or Windows Vista®.



**Don't get left behind.  
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# Building Information Modelling (BIM) for Electrical Design & Documentation

## DDS-CAD Electrical 6.4

# DDS-CAD 6.4



*"The extraction of quantities by a click of the mouse from the installation planning saves a lot of time. There is no other CAD system on the market that offers the same level of capability." - Wolfgang Fiegl, Sulzer and Partner, Germany*

## About Data Design System

For two decades DATA DESIGN SYSTEM has developed complete CAD solutions for the construction industry. With more than 12,000 users world-wide, Data Design System is one of Europe's leading construction software houses. Data Design System ASA has its headquarters in Stavanger, Norway and has a strong financial base resulting from the company's commitment to innovation and value for money. High standards of development and customer care are maintained by substantial investments in R&D and product support each year.

The high level technical quality of the products and their various applications are the results of many years of practical construction experience and intensive international research and development work. Based on a proprietary CAD Core, Data Design System offers modular, object-oriented solutions, which are adaptable to the needs of the users.

Data Design System ASA has subsidiaries in Germany, Austria and the UK, and is listed under the symbol DDSY on the Norwegian OTC stock market.

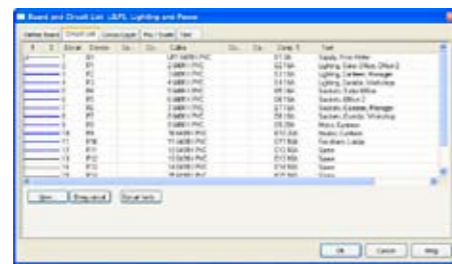
## DDS-CAD Electrical Features

### Fast, Efficient and Comprehensive

While other packages may provide support for some elements of electrical design, **DDS-CAD Electrical** provides the widest set of functionality available on the market today. From power distribution and containment, to lighting and fire and security alarms, data and telecoms, EIB bus-system, audio-visual and speaker systems. This means that the building's entire electrical installation can be designed and fully documented from a single source, improving accuracy, ensuring the installation is fully co-ordinated, and boosting your productivity.

### Integrated Calculations

Integrated calculations ensure design integrity is maintained during the life-cycle of the project, improving productivity and reducing errors incurred during manual translation to and from external design programs.



DDS-CAD Electrical has built in tools for calculating cable sizes, and short circuit analysis. It also includes a lighting design tool which uses the lumen method calculation to estimate the required number and distribution of fittings in a space. If you need more powerful lighting design analysis, the program has a bidirectional interface with industry leading tools from Dialux and Relux.

### Integrated Multi-Disciplinary Collision Detection



Reduce errors, avoid rework on site, and reduce risk with DDS-CAD Electrical's built-in collision detection functionality. This allows you to co-ordinate the design of the electrical services with the mechanical and plumbing services, when used in a multi-disciplinary project. This leads to a higher reliability

of design, allowing for more off-site prefabrication, at better quality and lower cost.

### Visualisation and Presentation

The software provides you with the ability to visualise the design prior to construction, using our advanced rendering and animation tools. These tools allow you to consider value engineering, and to investigate construction sequencing, at an early stage of the design. They are also valuable for non-technical client presentations, which improves communication, leading to fewer call-backs, and lower warranty costs.



### Efficient Project Documentation

With DDS-CAD you can create both 2D drawings and 3D visualisation, schematic circuit diagrams, schedules, quantities and a host of project management documents such as revision lists, drawing lists and distribution lists, directly from the program.

Intelligent layer grouping allows you to create multiple, discipline specific drawings from the model, for example lighting, alarm systems, data and telecoms. A change to the project can affect many of these drawings; with Electrical Partner you make the change once, and all the documentation can be re-created without having to alter many separate drawings.



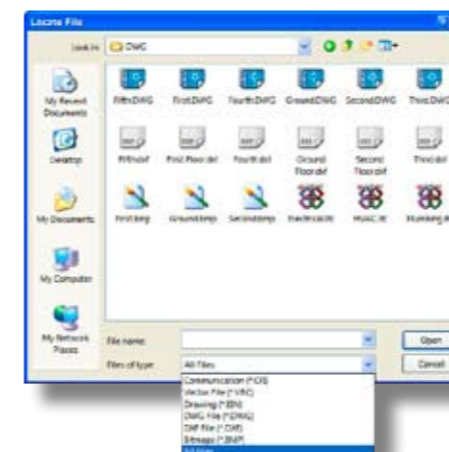
### Multi-User Design Environment

MEP design for a project can be carried out by large teams concurrently on a single project file. Your colleagues' design updates can be seen immediately in context with your own work. Making design co-ordination simple and efficient to achieve, enhancing productivity, while reducing errors and costly rework.

### Automatic, Configurable Bills of Quantity (BOM)

One of the key benefits of modelling is that when you have created the model, you do not just have an drawing to give to the installation team or construction partners, but you have also produced a database of components for the project which can be used to develop cost estimates and schedules. No more manual estimation of components on printed drawings, and the attendant risks of over or under estimation of the quantities. The quantity output can be exported directly into an estimating or job costing package.

### Wide Range of Import Formats



DDS-CAD Electrical can import existing CAD data in DWG or DXF format, or intelligent IFC models or even BMP. For more details of the benefits of working

on IFC based projects, please visit our website at [www.dds-cad.com](http://www.dds-cad.com)

### Extensive Range of Export Formats

DDS-CAD Electrical can export in DWG, DXF, DWF or SVF format, intelligent IFC models, various graphic file formats including BMP, Tiff and WMF. Visualisations and animations can be exported as QuickTime movies.

### Much More than Just Symbols

When you plan a project with a traditional CAD package, you draw lines and text and hatching to represent both the building and the electrical layouts. With DDS-CAD Electrical you are not working with "lightweight" drawing elements, but real-world objects. Need to add a room to your building? Select the Room tool and trace the outline of the space, and the software will automatically create walls, floors, ceilings for you.

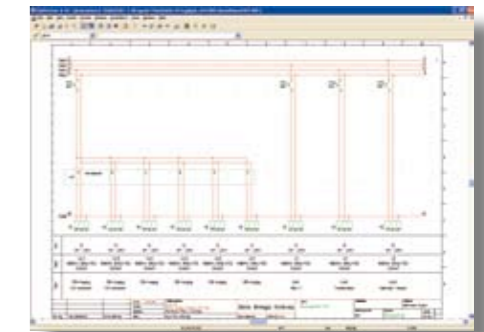


And when you come to add the electrical components, the software knows that sockets and switches must be placed at a specific height to comply with the Building Regulations. These electrical components you add to the model are not just symbols, they are intelligent objects that have both 2D and 3D representations, and contain the technical data associated with them.

### Unrivalled Scope for Electrical Design

DDS-CAD Electrical has the most comprehensive functionality available on the markets today. EIB Bus System, Data and Telecoms, Alarms, PLC, Audio Visual, and much more. See the features list for more details.

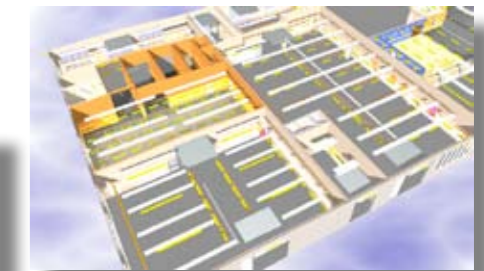
## Schematic Drawings



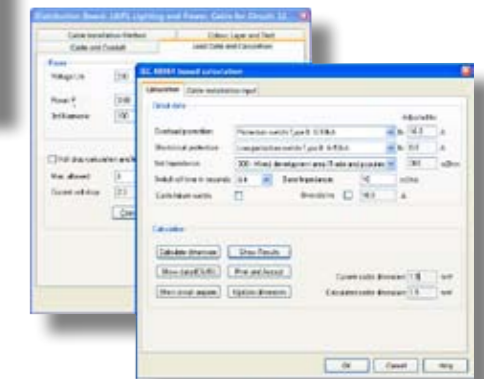
## Bills of Quantity



## 3D Rendering and Animations



## Built in Calculations



## Lighting Design

