valentin software

# PV*SOL® | Design Software for Photovoltaic Systems

Valentin Software has successfully developed intelligent software solutions for planning, design, dynamic simulation and yield calculation of energy supply in buildings, as well as for industrial and commercial use, for over 25 years. Our simulation programs help system designers, engineers, consultants, installers, tradesmen and investors to professionally plan and dimension photovoltaic systems.

PV*SOL®

The further PV feed-in tariffs decrease, the more important it is to convince end users that self-consumption also contributes to the profitability of a solar electric system. With our dynamic minute-step simulation you can now calculate self-consumption and storage in battery systems even more precisely.

PV
PV*SOL
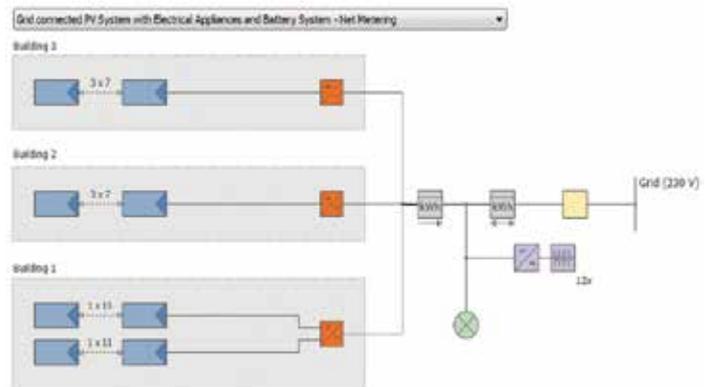
System selection for self-consumption with battery storage system

PV*SOL® premium

The more realistically the shading of a PV system through objects in the immediate vicinity can be simulated, the more accurately the yield can be calculated. It is therefore an advantage to work with the 3D visualization in PV*SOL® premium.

PV *p*
PV*SOL premium

You can visualize roof parallel and mounted systems in 3D and calculate the shading on the basis of 3D objects (also for ground mounted systems). And importing satellite maps into the 3D visualization makes the PV design process even easier and faster.

PV*SOL® premium also includes all of the features in PV*SOL®.
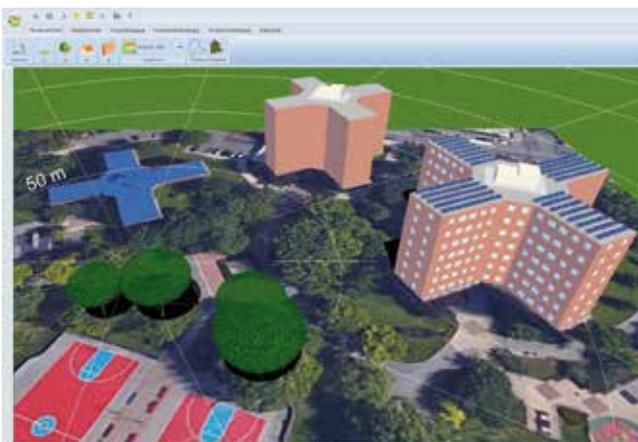
Import of satellite maps and easy extrusion of buildings
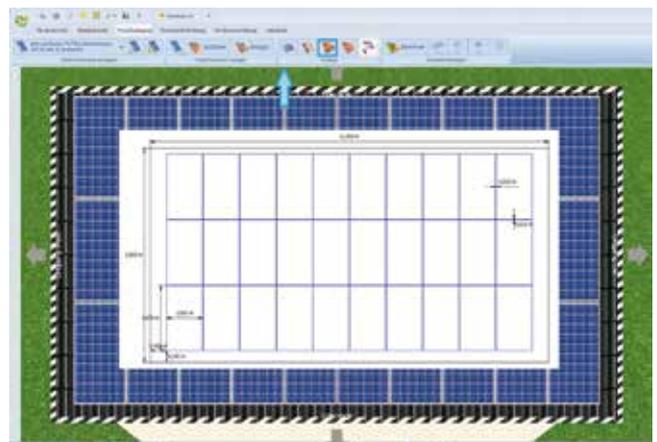

Dimensioning plan - can be exported into CAD programs

PV*SOL® and PV*SOL® premium Features

New!

Calculation of electric vehicles with battery storage system

An electric vehicle is simply selected from the database, and then the daily mileage is entered. PV*SOL® calculates how much PV energy can be used to charge the car. The software also calculates the cost per 100 kilometers with and without the use of photovoltaics.
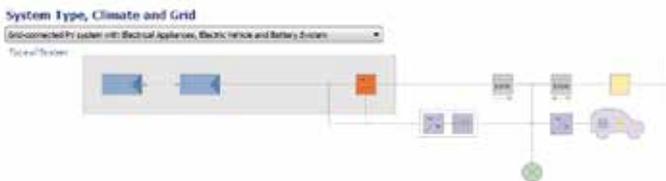
PV*SOL allows the integration of electric vehicles with a battery storage system

Import of Satellite Maps (premium only)

Buildings and objects can be created quickly and easily on the basis of floor plans, cadastral maps and screenshots from satellite maps. Only the respective contours need to be traced, and then the building can be extruded by entering the height. This makes it possible, for example, to produce any building shape with a flat roof.

Battery Storage

Plan your own battery storage system by selecting the batteries used and defining the battery inverter and charging strategy. Alternatively, you can select pre-configured complete systems from the database - over 350 systems are available.
Due to the reliable and validated simulation results, you can make even more precise statements about the self-consumption and self-sufficiency rates.

Component Database

The extensive module and inverter database currently contains around 16,500 modules and 4,000 inverter data sets that are continuously updated and extended by the automatic update function. The data is maintained online directly by the respective manufacturers. You can speed up the selection of components by adding lists of favorites.

Climate Data

The MeteoSyn climate database contains around 450 data sets from the German Weather Service for Germany with the averaging period 1981–2010, as well as over 8,000 global data sets, based on meteonorm 7.1 (1991-2010). You can easily select the climate data via an interactive map. You can also create new climate data either by interpolation from existing measured values or on the basis of your own monthly mean values.

Simulation Results

After running a simulation in steps of a minute or an hour, the comprehensive results overview contains a detailed presentation of the simulation results, including charts and a cash flow table. Using the energy balance table, you can clearly follow all the gains and losses occurring in the PV system.
All results and the system details can of course be shown in a configurable presentation for the customer.
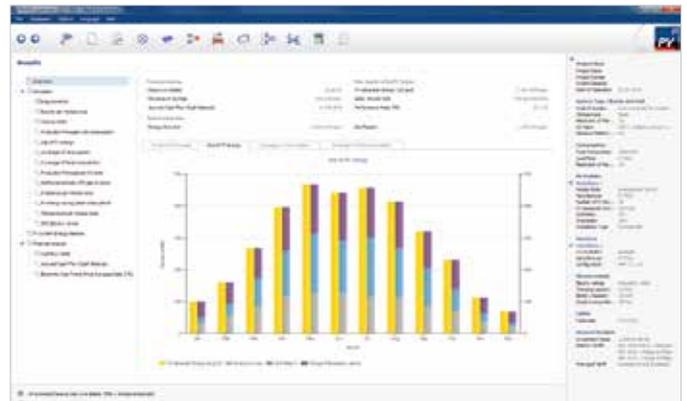
Clear presentation of results with yield and consumption diagram

Software Maintenance

Software maintenance includes both program and database updates, as well as our free telephone hotline (English or German). The program price includes six months' software maintenance from the date of purchase.

Program languages: *Project reports also in:*

TS T*SOL   **GT** GeoT*SOL   **PV** PV*SOL   **PV**ᵖ PV*SOL premium