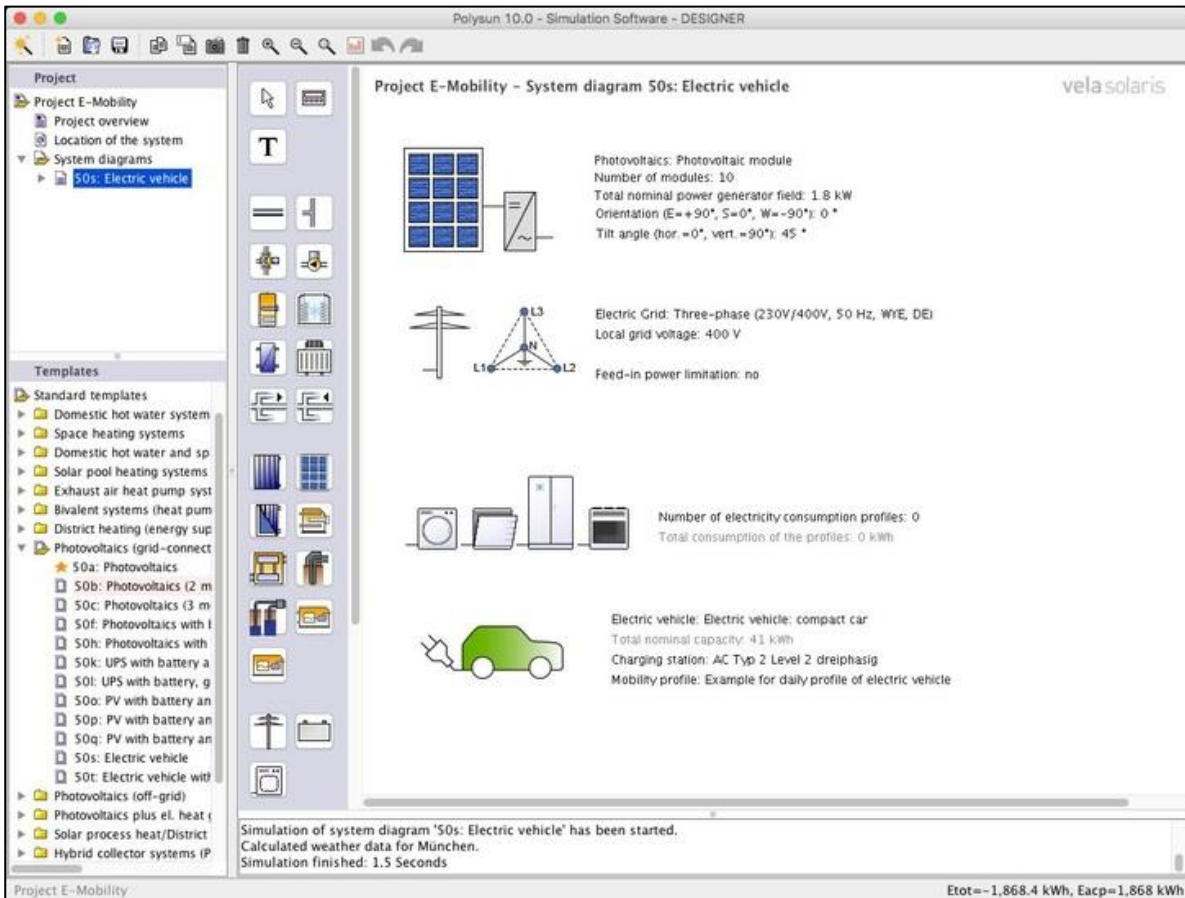


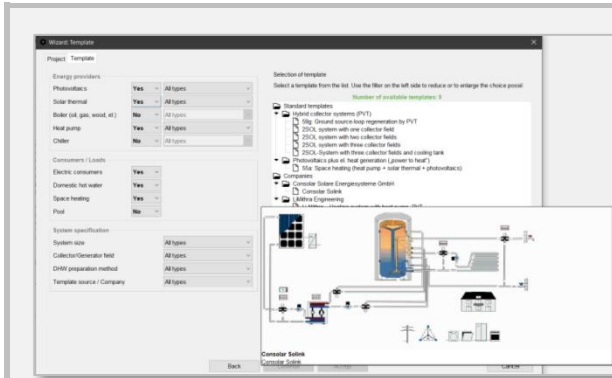
POLYSUN Photovoltaic (PV SYSTEM SIMULATIONS WITH PRECISION):



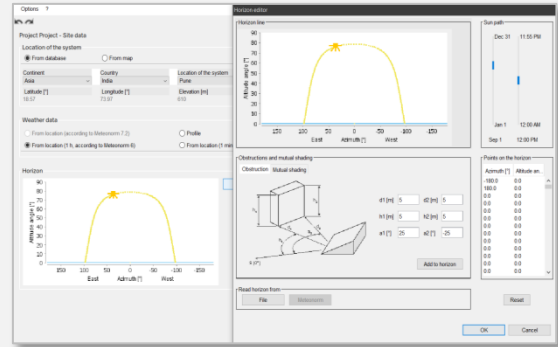
Features in brief:

- Validated calculation models for photovoltaic modules, inverters and batteries,
- Comprehensive product data bases of photovoltaic modules, inverters and batteries,
- Includes a selection of pre-configured system templates,
- Own systems can be created,
- Easy comparison of simulation results of several system diagrams,
- Detailed evaluation of simulation results per time step, 15 min., hourly or monthly values,
- Real time visualization using simulation analysis and graphic display of results,
- Up-to-date Meteonorm weather data delivered through a web service (worldwide),
- Comprehensive economic calculations including system comparison,
- Calculation of self-consumption based on entries of electric consumption profiles that are accurate down to one-minute-/five-minute-/fifteen-minute-time steps or hourly values,
- Variable prices for energy from the grid and for feed-in-tariffs can be factored in,
- Off-grid systems and simulation of uninterrupted power supply systems
- E-mobility
- Easy to use, simple to handle.

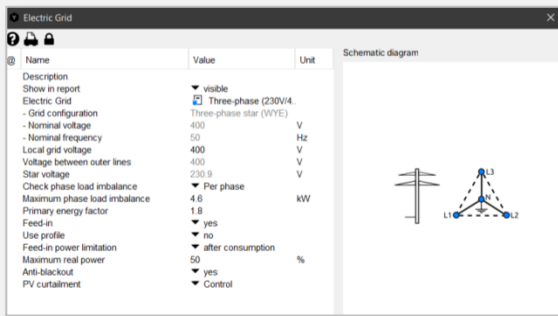
Features and Interface:



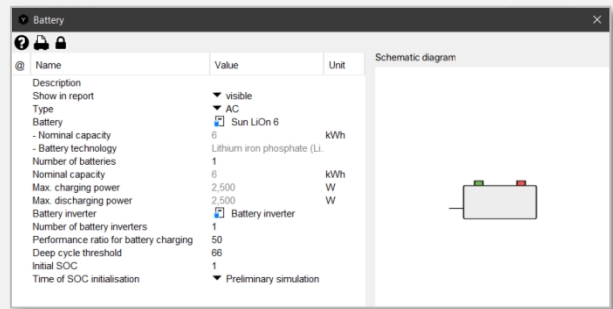
Wizards with Intelligent Filters



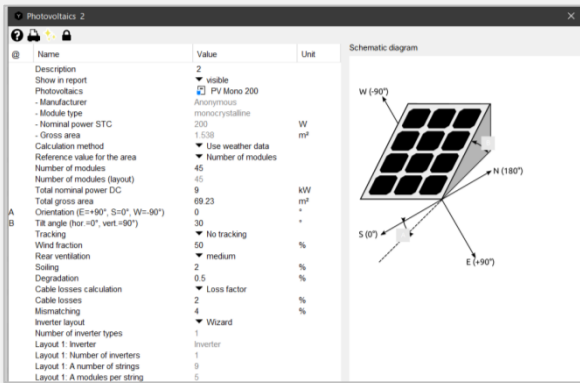
Horizon, Location, Obstruction Shading from Map or Database



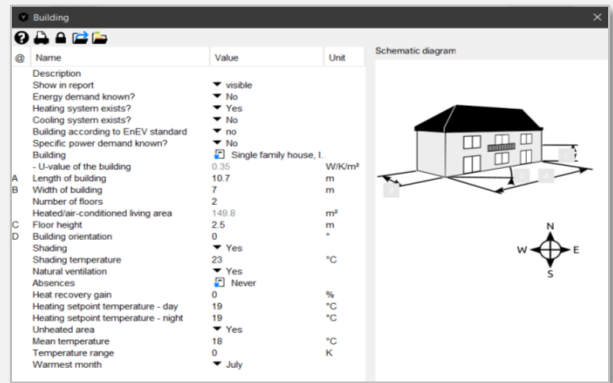
Grid Detailing



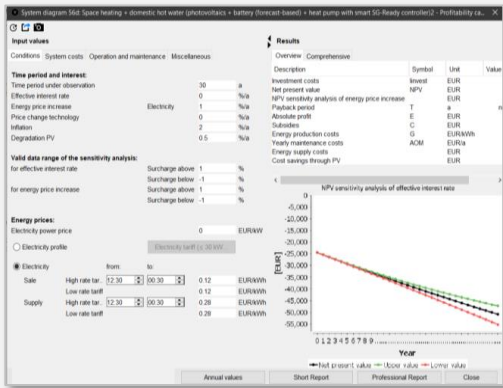
Battery Definition



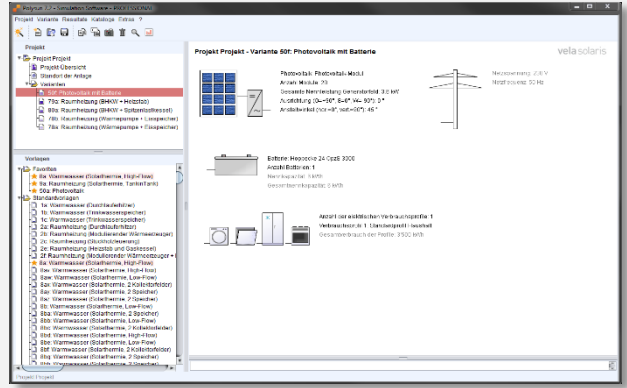
Detailed definition of Photovoltaics



Buildings Data



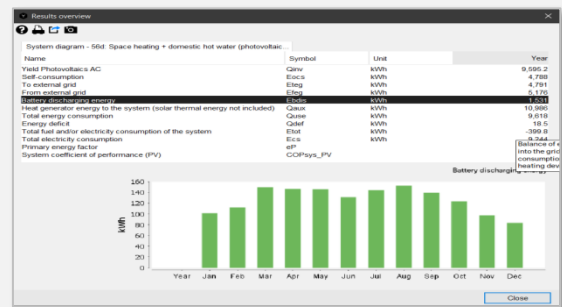
Profitability Calculations and Comparisons



Exhaustive Manufacturers Database

Name	Manufacturer	Date issued	Collector type	Test date	Quality test	Remarks	Number area [m²]	Aperture area [m²]	Glass area [m²]	Efficacy [%]
1	Polysun GmbH	2020	Photovoltaic collector	2020	ISO 9001		1.28	1.28	1.28	21.8
2	Polysun GmbH	2020	Photovoltaic collector	2020	ISO 9001		1.28	1.28	1.28	21.8
3	Polysun GmbH	2020	Photovoltaic collector	2020	ISO 9001		1.28	1.28	1.28	21.8

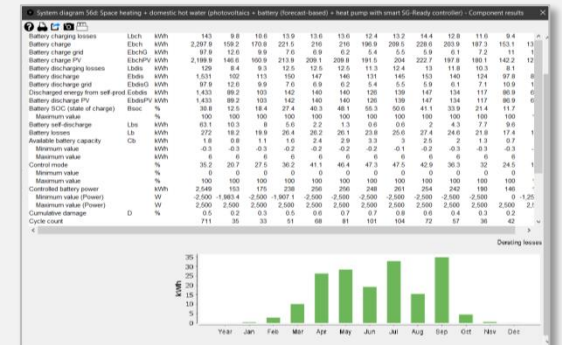
Exhaustive Manufacturers Catalogs



Results Overview



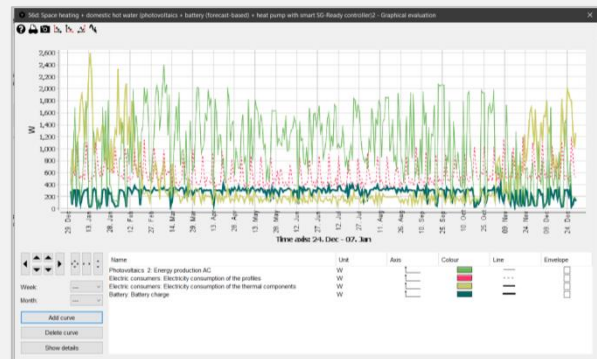
Thermal and Electrical Results



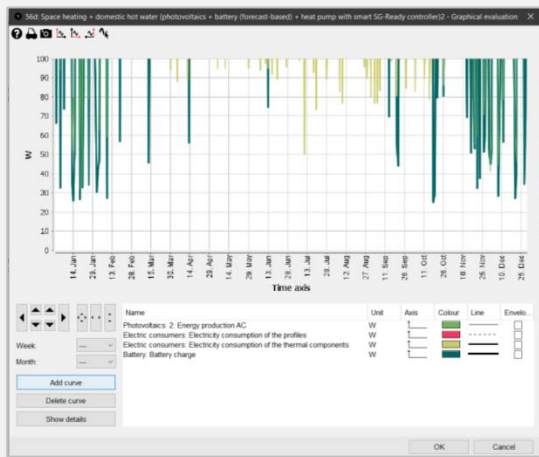
Component Results



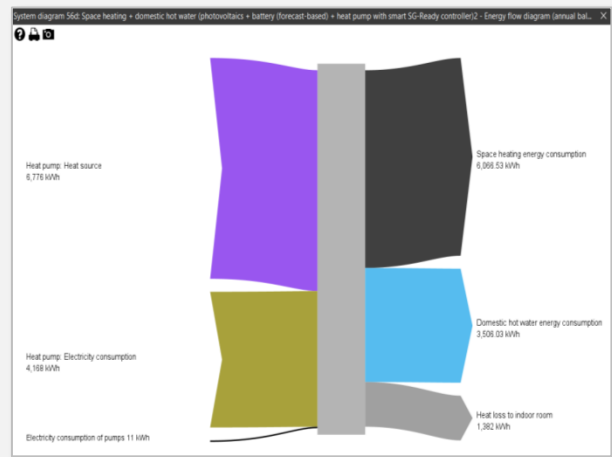
System Comparison Results



Graphical Evaluations



Graphical Evaluations



Energy Flow Diagrams

Professional Report

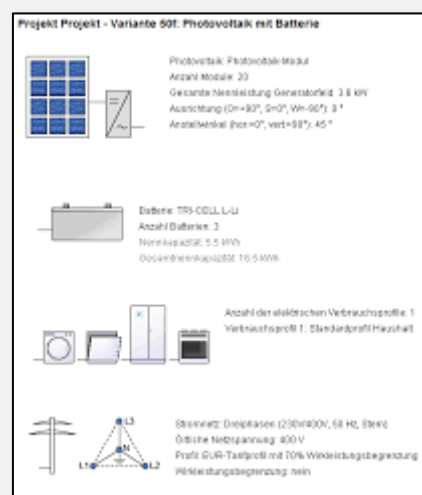
Professional Version

System overview (annual values)	
Total fuel and/or electricity consumption of the system [Etot]	363 kWh
Total electricity consumption [Ecs]	9,232 kWh
Total energy consumption [Quse]	9,615 kWh
Seasonal performance factor (SPF-SHP)	2.3
Primary energy factor	0.6
Comfort demand	Energy demand covered

Overview photovoltaics (annual values)	
Total gross area	69.2 m²
Energy production DC [Qpv]	9,512.7 kWh
Energy production AC [Qinv]	8,816 kWh
Total nominal power DC	9 kW
Performance ratio	78.8 %
Specific annual yield	860 kWh/kWp
Phase imbalance	0 kVA
Reactive energy [Qinvr]	0 kWh
Apparent energy [Qinva]	8,816 kWh
CO2 savings	4,729 kg

Overview electricity (annual values)	
Annual consumption	9,232 kWh
Self-consumption	4,664 kWh
Self-consumption fraction	52.9 %
Degree of self-sufficiency	42.1 %

Overview heat pump (annual values)	
Seasonal performance factor for air-to-water heat pump	2.6



Professional PDF Reports

POLYSUN- PV Desktop Software addresses Photovoltaic only

(Please note that there are NO Thermal components included in PV version)

Polysun PV features

Acknowledged yield forecasts

Our reliable yield forecast including current weather data can be used by you efficiently from the first, preliminary study through the funding phase and through the optimization of the system.

Inverter lay-out and system comparison

Thanks to an inverter lay-out that is both simple and independent from manufacturers, and thanks to a comparison of different versions of a system, you will get different variations of an energy system in a short period of time.

Calculating your self-consumption using load profiles, battery and e-mobility

Use a simulation to discover the advantages of including e-mobility or a battery in your system, it will enable you to make statements about the economy of such intelligent energy concepts.

Detailed evaluation and optimization possibilities

You can analyze and optimize your system in a user-friendly and clearly laid out way. Using technical reports and profitability calculations, you will find the best solution both in the energetic and in the economical sense.

New features

Higher resolution of load and weather profiles

Load and weather profiles can now be uploaded as one-minute-profiles.

Detailed graphical evaluation

Results now can be depicted and saved in a resolution by the second.

Battery model

Using the PerMod battery simulation model, both AC and DC coupled systems are now calculable.

E-mobility

Using the new profile editor, you can quickly create e-mobility profiles.

*** Important Notes for POLYSUN License type and details:**

Academic: In the case of an academic teaching license, the Licensee shall only use the Software for educational purposes. Educational purposes shall only include teaching and Research projects.

System Requirements (Minimum specifications):

- Compatible with Windows 10, 8, Vista, XP,
- Minimum 1 GB RAM
- 500 MB storage space
- Internet connection (for installation and updates only)