

Design your electrical project from the PV panel to the EV charging station

With **elec calc SOLAR**, your photovoltaic project is directly integrated into a comprehensive electrical study, from PV string modeling to grid connection, within a single diagram, with no need for re-entry.

Automated sizing at every step

The calculations are integrated in real time into the study, automatically applying the

IEC 60364-7-712 (DC) and **international (AC) standards** (BS, NEN, NIBT, AREI, VDE, REBT, NF).

The software calculates voltage drops, power flows, short-circuit currents and automatically sizes protections and cable cross-sections, consistent with the entire installation.

It features an integrated multi-manufacturer catalog and automatically generates the complete technical documentation, including schematics, bills of materials, and calculation reports.



Key benefits



A single design environment



No re-entry between photovoltaic and electrical sizing



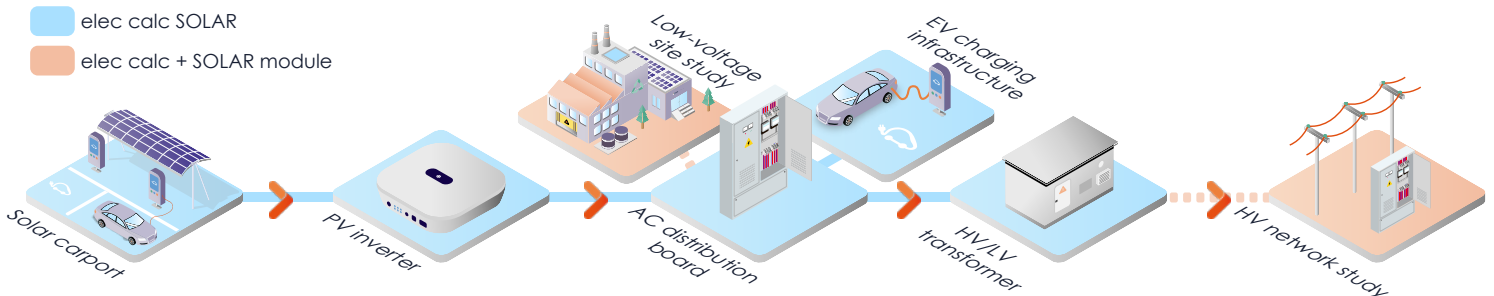
Modelling that is true to your facilities



Built-in real-time prescriptive calculations

Solutions that adapt to your projects

- elec calc SOLAR
- elec calc + SOLAR module



Continuity with your PV planning tool



Import your projects from **archelios PRO** and continue electrical sizing without re-entering or data loss.

Integrate your photovoltaic projects into a complete electrical study



Already using **elec calc**?

Simply add the **SOLAR module** to your existing environment and extend your projects to photovoltaics, without changing tools or re-entering data.

- From DC to the AC switchboard, PV sizing and grid connection within the same project
- Complete electrical installation of the site, connected to all types of LV or HV networks
- Designed for complex electrical installations, including high voltage and multi-source systems
- Compatible with elec calc IRVE, HV/LV, BIM, and GRID

elec calc | solar



EV charging station + HV transformer

elec calc
+ SOLAR module



LV distribution + HV network / substation

Referenced by



Features

Intelligent Facility Modeling

- Free design of the electrical synoptic diagram
- DC/AC sizing on all HV/LV voltage domains
- Complete electrical installation within the same project
- Lightning analysis and DC/AC surge protection management
- No third-party tools required (SLD, calculations, quantities)

Advanced PV inverter management

- Intelligent channel assignment
- Automatic verification of MPPT ranges
- Configuration inconsistency alerts

Management of the electrical project

- Dynamic power balance
- Power flow visualization
- Anticipating network constraints

Interoperability with **archelios PRO**

- Direct import of the photovoltaic configuration
- Digital thread without re-keying

Real-time prescriptive calculations

- Automatic Checks IEC 60364-7-712
- Application AC standards up to the point of delivery (BS, NEN, NIBT, AREI, VDE, REBT, NF)
- Automatic selection and setting of protective devices
- Calculation of cable cross-section
- Voltage drop control

A multi-manufacturer database

- Photovoltaic modules
- Photovoltaic inverters
- Electrical protections
- Surge arresters
- EV charging stations

Automatic generation of deliverables

- Calculation reports
- Detailed electrical diagrams
- Material BOMs



TrustScore 4.7 | Excellent