



# Building integrated Photovoltaics a Game Changer

Award-winning climate technology designed δ Made in Germany









#### Autarq at a glance

We have set out to establish the European standard for building-integrated photovoltaics (BIPV).

- Autarq GmbH established 2012 by Cornelius Paul, electrical engineer
- Headquarters and factory in **Prenzlau (Brandenburg)**, Germany
- 1.000+ references in 6 European countries
- partnerships with leading roof tile manufacturers
- Award-winning:

















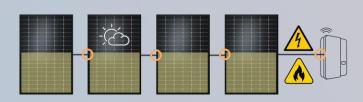


### Reversing the logic. What a difference the design makes.

Turning high risk and low yield into **high yield** and **low risk**. All it took was to design a system operating in a parallel circuit in Safety Extra Low Voltage  $\delta$  getting rid of all power electronics.

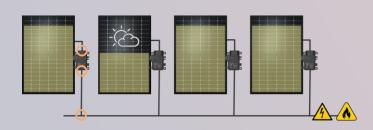
\*: on the roof

Conventional solar system

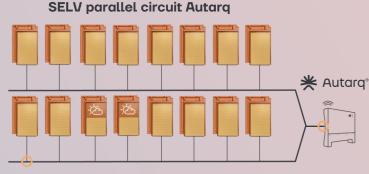


low cost, high losses, high risk

Conventional solar system with power electronics



highest lifecycle cost, reduced losses, lowered risk



lowest lifecycle cost, highest yield, lowest risk





### Uncompromising craftsmanship orientation

No complex planning and no power electronics on the roof. The roofing trade installs the Autarq system completely independently - without any complex additional qualifications.

- Standard roofing material / roof tile, therefore seamless integration into the roof aesthetics
- No restrictions on planning and designing the roof
- Also suitable for angled or modern roof shapes with a flat slope: optimal use of the area, high cost-effectiveness
- High acceptance by building authorities and monument protection authorities

- Proven work processes remain unchanged
- Clear separation of trades and delineation of warranty
- Easy installation without prior electrical knowledge
- High level of safety thanks to low voltage range (< 120 Volt<sub>DC</sub>)
- No roof penetration, uninterrupted rear ventilation







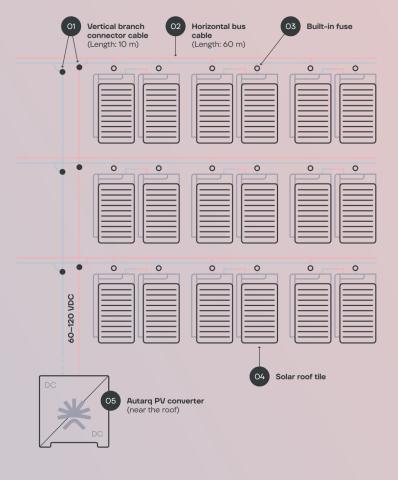
#### Well thought-out design, outstanding function δ safety

The low voltage and parallel connected system and its components.



- O1 Solar roof tile with proprietary miniature module and connector.
- **Wire harness** proprietary design for extra low voltage and parallel circuit.
- O3 PV-Booster proprietary design central power electronic device assuring system compatibility.

- Fully adaptable to existing roof standards. No extras!
  - Best in class **shadow resilience** without any power electronics on the roof.
- Unrestricted accessibility and **easy to maintain** fanless device.







## Vertically fully integrated design & manufacturing capability

Full supply chain control from bespoke module to connector to wire harness.











