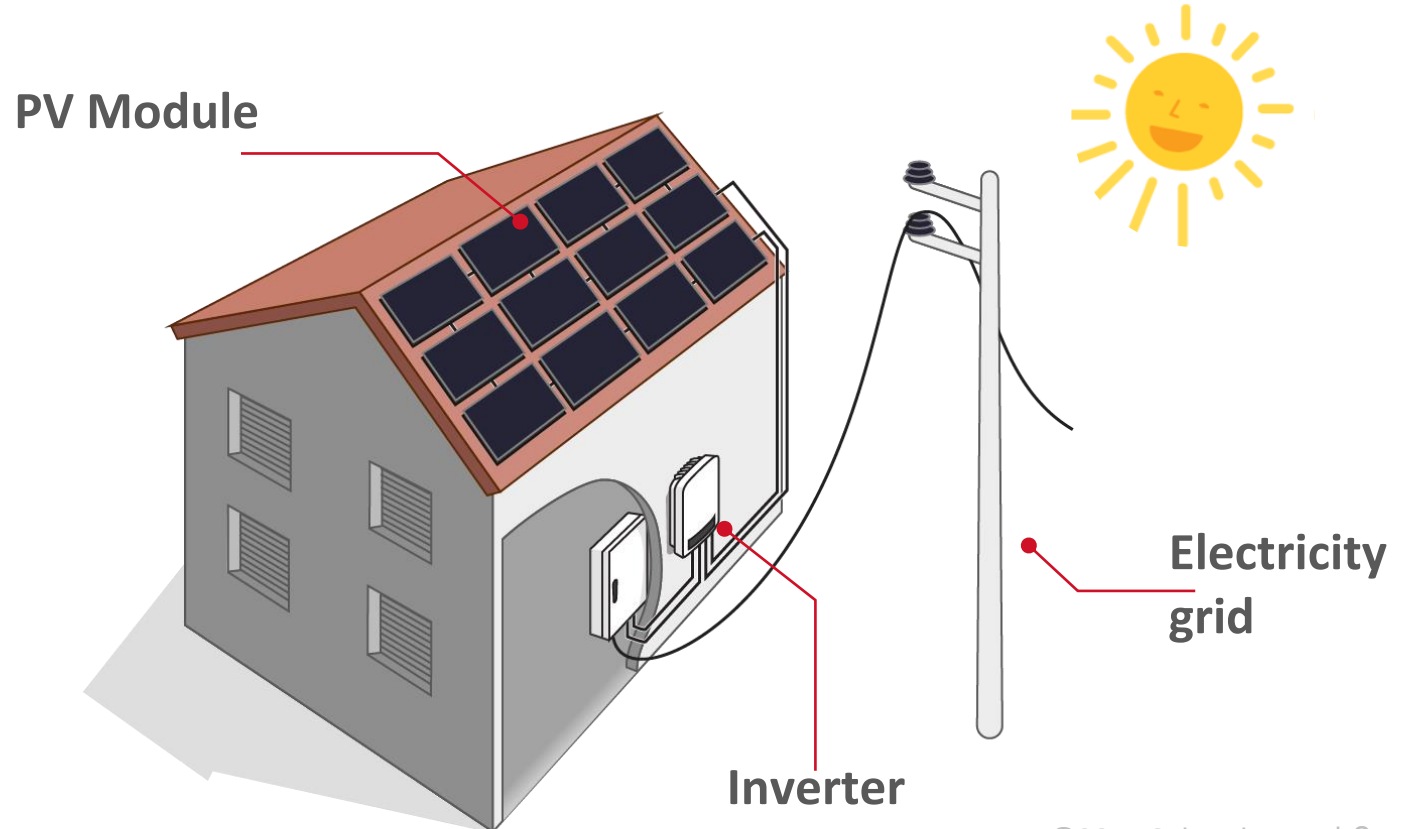


**SolarEdge Solution -
Making PV Panels
Smarter**



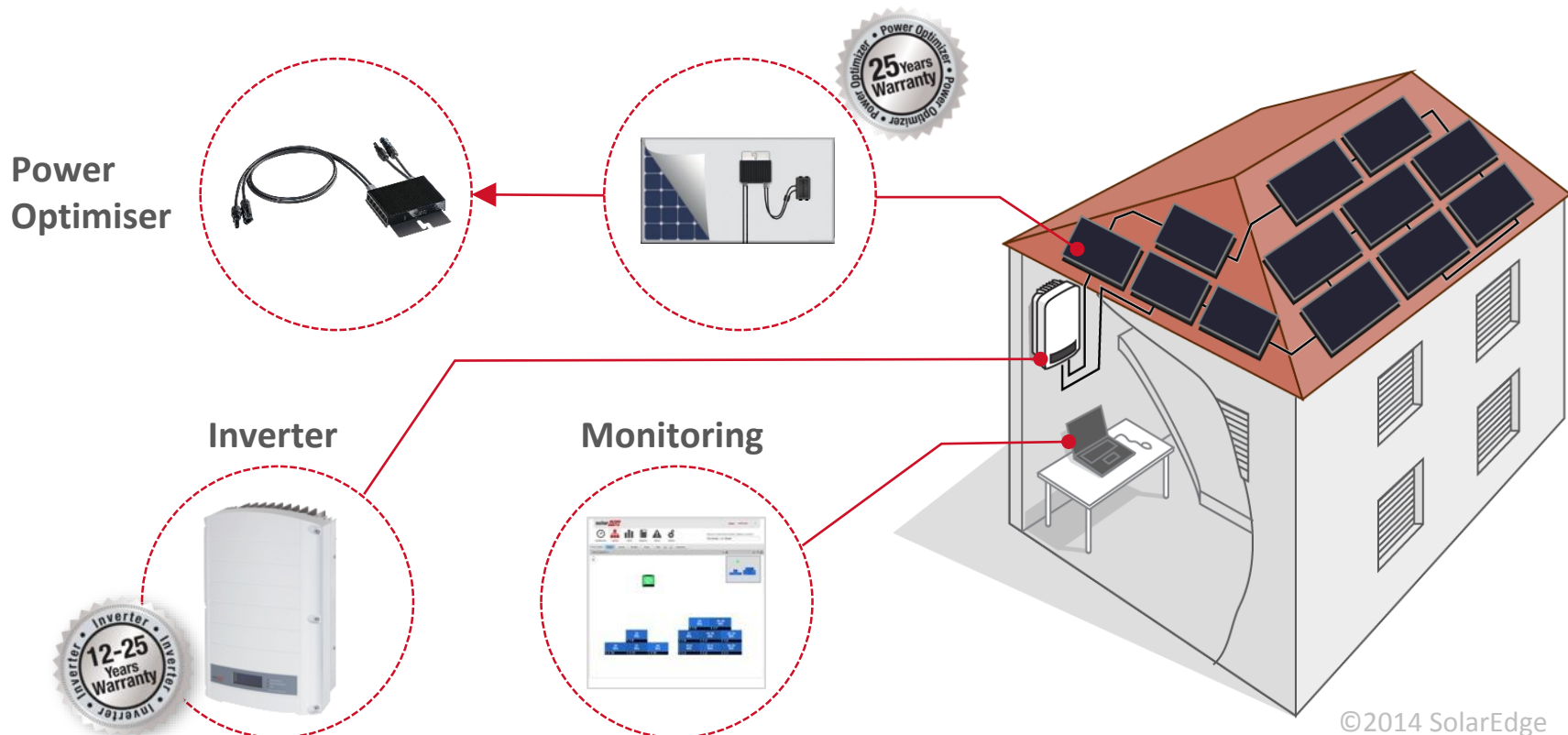
Overview of PV Systems

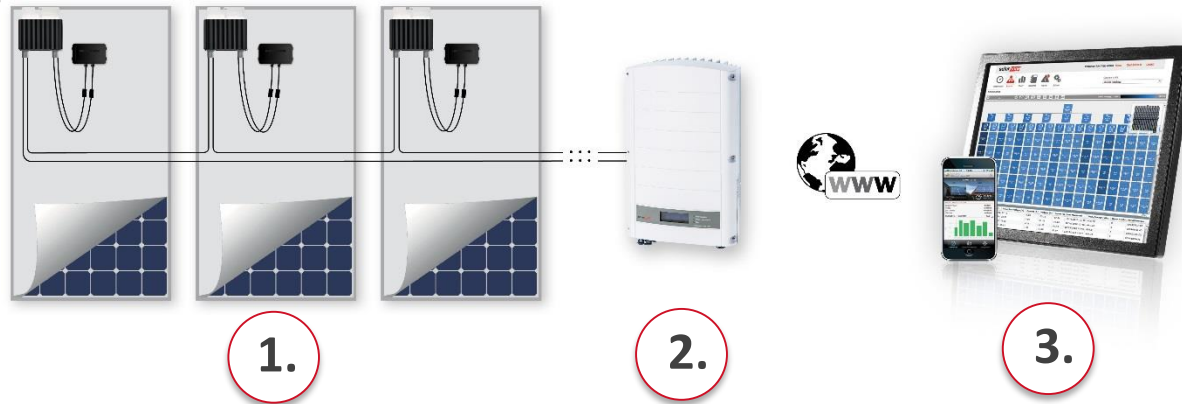
- Solar panels convert sun energy to electricity
- A solar inverter is required to convert the DC electricity generated by the panels into a grid-compliant AC electricity



The SolarEdge System

- Each panel is connected to a single power optimiser
- Power optimisers are electronic chips that maximize energy from each panel individually
- An inverter converts DC to AC
- Monitoring portal visualizes performance of each panel





1. Power Optimizer

By connecting a SolarEdge power optimiser to a PV panel it becomes a smart panel.

This allows:

- Harvest of up to 25% more energy from each panel
- Constant feedback on the performance of each panel
- Automatic shutdown of each panel for maximum safety in case of emergency

2. Inverter

The SolarEdge inverter is simpler and more reliable:

- Responsible only for DC to AC conversion, as all other functions are handled separately for each panel by the power optimisers
- Small and esthetic

3. Monitoring Portal

By displaying real-time performance data, the monitoring portal allows:

- Full visibility of your system performance
- Automatic alerts on system issues
- Easy access from a computer, smartphone, or tablet

SolarEdge on the Roof



Why SolarEdge?



MORE POWER

**MORE PANELS
ON THE ROOF**

**ENHANCED
SAFETY**

**ADVANCED
MONITORING**

Up to 25% More Energy

MORE POWER

More panels
on the roof

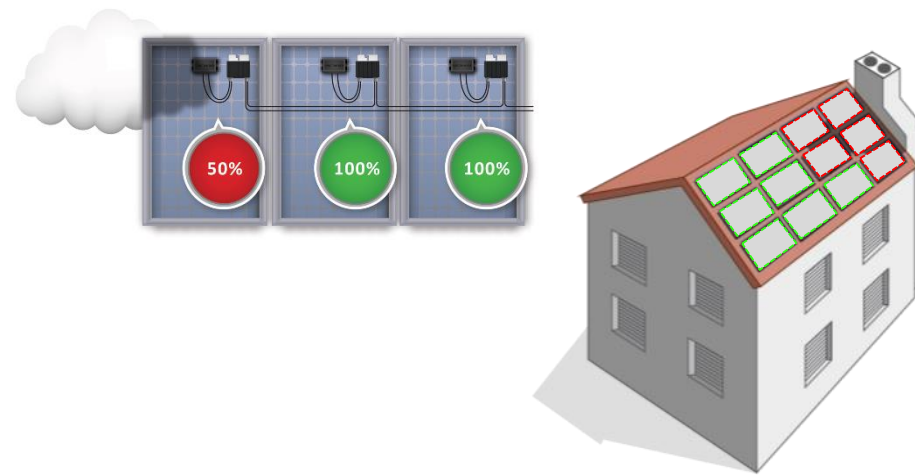
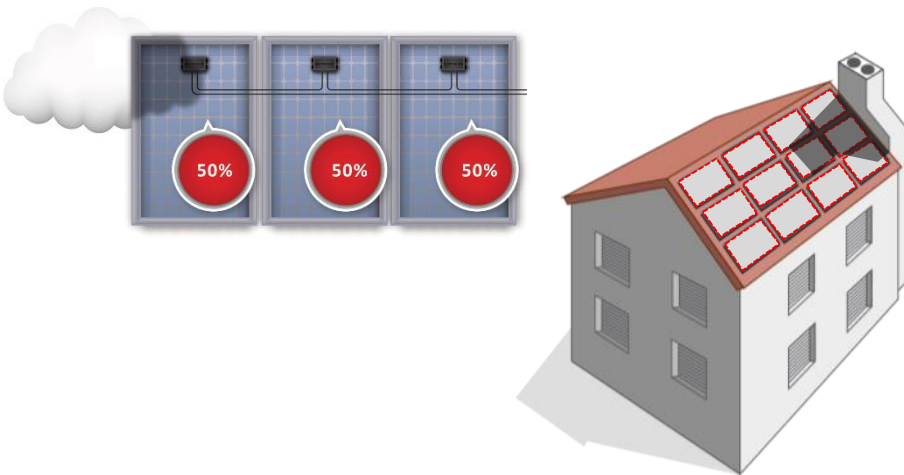
Enhanced
safety

Advanced
monitoring

- In a PV system each panel has an individual maximum power point
- Traditional inverter – weakest panel reduces the performance of all panels
- SolarEdge – each panel produces the maximum energy.
 - The weakest panel does not affect the performance of the rest of the system

Traditional Inverters

SolarEdge System



What if I don't have any shading?

MORE POWER

More panels
on the roof

Enhanced
Safety

Advanced
monitoring

- In a traditional system, any kind of mismatch between panels introduces power losses. SolarEdge power optimisers eliminate these power losses

Soiling



Potential future shading



Snow



Bird droppings



Leaves



Uneven Panel Aging

MORE POWER

More panels
on the roof

Enhanced
Safety

Advanced
monitoring

- Panel performance degrades 20% over 20 years
- However, each panel will age at a different rate
- SolarEdge – each panel is producing the maximum energy without affecting the performance of other panels



Traditional – Limited Roof Utilization **solar**edge

More power

**MORE PANELS
ON THE ROOF**

Enhanced
Safety

Advanced
monitoring



Traditional design



SolarEdge – More Panels on the Roof



More power

MORE PANELS ON THE ROOF

Enhanced Safety

Advanced monitoring

- All roofs are possible



- Aesthetic integration of the PV system



- More panels on each roof

SolarEdge design



Higher system capacity



More revenue



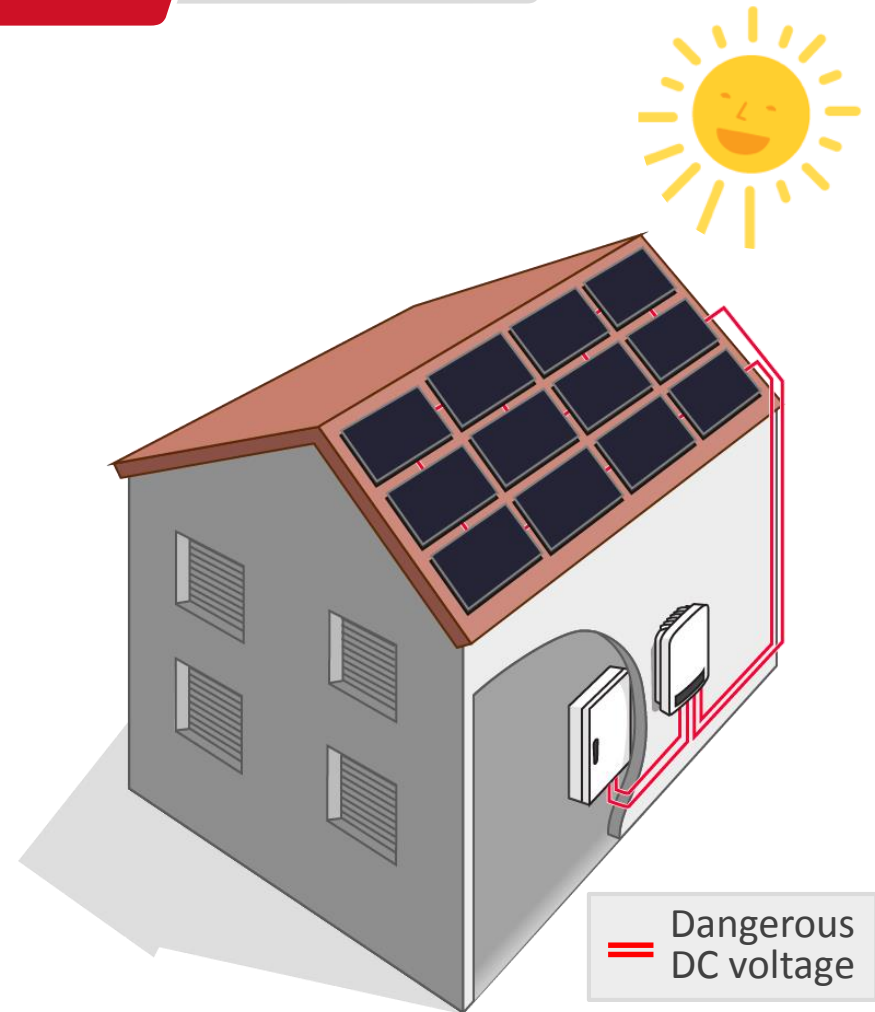
More power

More panels on the roof

ENHANCED SAFETY

Advanced monitoring

- PV systems are safe and pose no danger to people and property
- However, as long as the sun is up, PV wires are energized with high DC voltages
- With traditional inverter, there is no option to shut down the high voltage on the roof



SolarEdge – Enhanced Safety

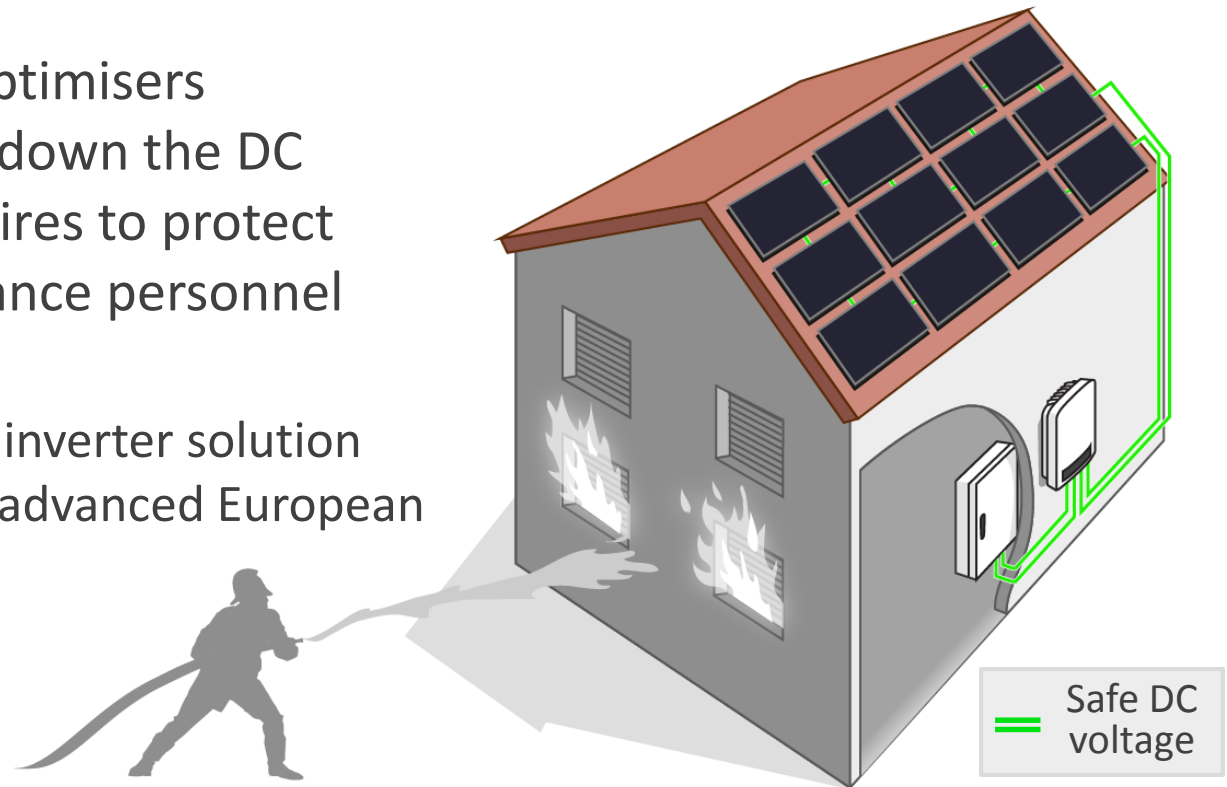
More power

More panels
on the roof

**ENHANCED
SAFETY**

Advanced
monitoring

- With SolarEdge whenever AC power is off, DC wires are automatically de-energized
- SolarEdge power optimisers automatically shut down the DC voltage in the PV wires to protect installers, maintenance personnel and firefighters
- SolarEdge is the only inverter solution that meets the most advanced European safety standards



The SolarEdge Safety feature is certified to IEC 60947 as a disconnection means between a PV inverter and a PV generator, and to VDE 2100 for safety in cases of firefighting or maintenance.

Advanced Monitoring

More power

More panels
on the roof

Enhanced
Safety

ADVANCED
MONITORING

Full visibility of system performance

Monitor at all times the performance of each of the panels in your system and secure your long-term investment



Anytime, anywhere

Get updates on your system's performance status anytime, anywhere using free iPhone and Android applications



- **Performance** – each of your panels generates the maximum possible energy
- **Warranty** – 25-year warranty for power optimisers; 12-year standard warranty for inverters
- **Control** – the monitoring portal allows you to verify your panels performance at all times and to resolve any system issue quickly and accurately
- **Safety** – automatic shutdown of panel DC voltage protects your installers, maintenance personnel, and firefighters in case of emergency

