



# Making PV Panels Smarter

Up to 25% More Energy from Your System



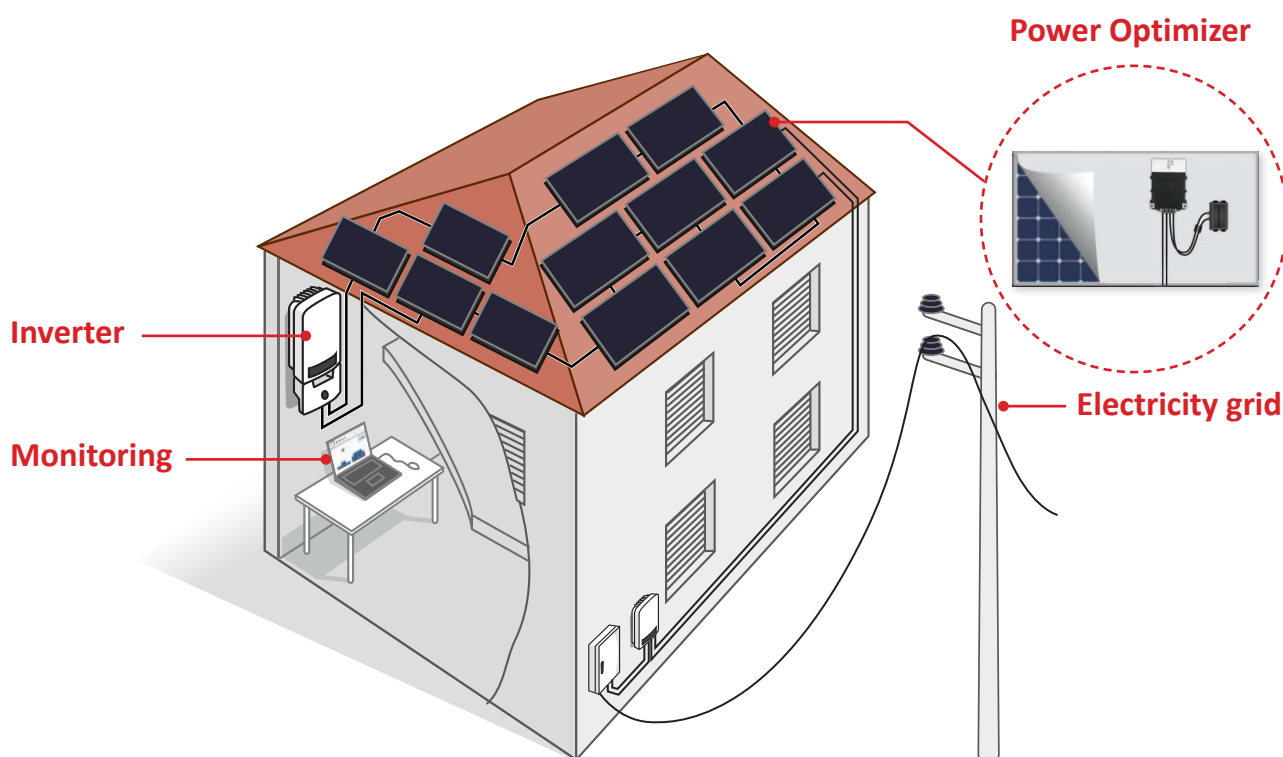
Connecting SolarEdge power optimizers to PV panels makes them **SMART PANELS** that produce **MORE POWER** at all times



# Making PV Panels Smarter

## The SolarEdge Solution

SolarEdge is the proven leader in PV power optimization with more than 3 million power optimizers installed in more than 50 countries worldwide. The power optimizers connected to the panels enable them to produce more energy from your system, compared to a traditional system, for a better return on your investment.



### 1 POWER OPTIMIZER

By connecting a SolarEdge power optimizer 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

A simpler and more reliable inverter:

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

### 3 MONITORING

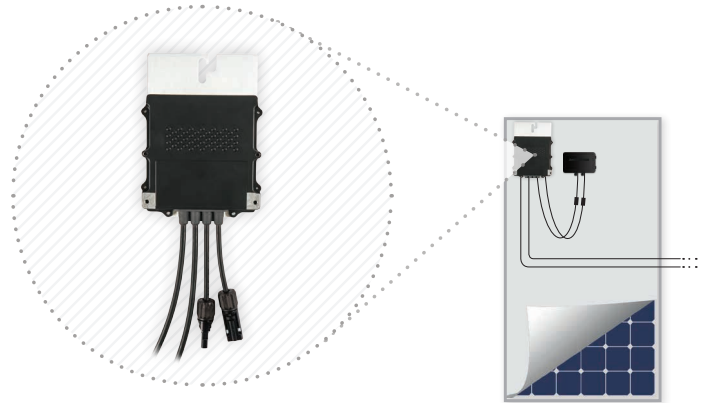
By displaying real-time performance data, the monitoring portal allows:

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

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## 1 POWER OPTIMIZER

- Power harvesting per individual panel
- Operates in extreme environmental conditions
- 25-year warranty



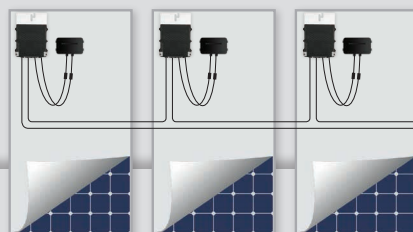
## 2 INVERTER

- Very high efficiency (97.6%)
- Superior reliability
- Internet communication
- Standard 12-year warranty, extendable to 20/25 years



## 3 MONITORING

- Easy to navigate monitoring portal
- Display of data for each panel
- 25 years of free monitoring service



Power Optimizer



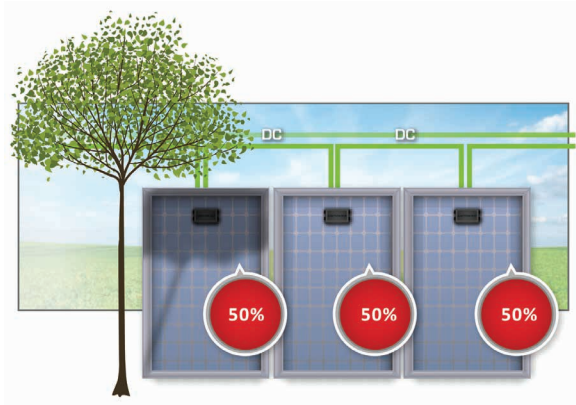
Inverter



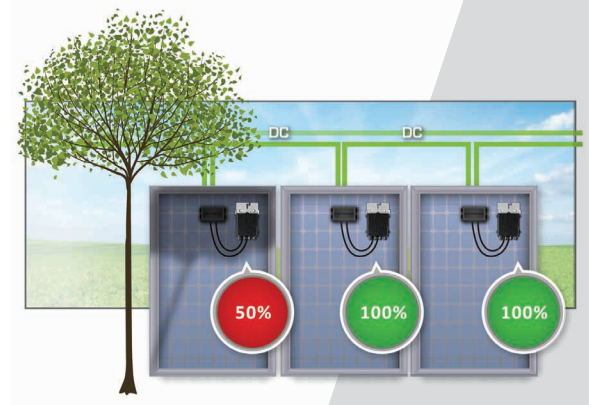
Monitoring Portal



## TRADITIONAL TECHNOLOGY



## SOLAREDGE TECHNOLOGY



### Performance

- Output of all panels is affected by the weakest panel
- Substantial energy losses due to unevenly dirty and shaded panels
- Each panel generates the maximum possible energy

### Peace of Mind

- Limited warranty - between 5 to 10 years
- Limited monitoring with no information on problematic panels
- 25-year warranty for power optimizers; 12-year standard warranty for inverters
- The monitoring portal displays performance of each panel allowing remote troubleshooting for fast and accurate resolution
- Panel-level monitoring free for 25 years

### Safety

- Panels produce very high voltage (up to 1000V) even after the inverter or the electricity is shut down
- Automatic shutdown of panel DC current and voltage during installation, maintenance, and in case of emergency

### Cost Effectiveness

- Many design constraints that limit system size
- Higher cost of wires, fuses and other electrical components
- Monitoring at the system level complicates maintenance
- Design flexibility allows maximum roof utilization and more panels per system
  - Panels in partially shaded areas
  - Panels installed at different azimuths & tilts

**solar**edge