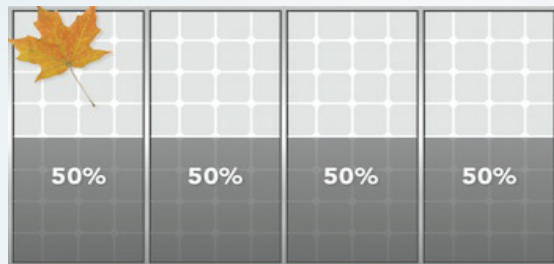


## System Owner

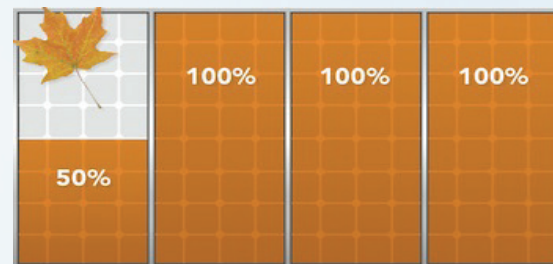
Performance

### String Inverter System



- » Entire system affected by one module
- » Susceptible to soiling, shading, and module defects

### Enphase Energy System



- » All modules operate independently
- » Resilient to environmental factors
- » 5-25% increase in energy production



Reliability

- » 5-10 year warranty
- » Susceptible to problems with vents and fans
- » Inverter outage affects entire system
- » Limited detection and reporting of problems

- » 25-year warranty
- » Completely enclosed; no moving parts
- » Inverter outage affects small fraction of system
- » Automatic detection and reporting of problems

## Installer

Speed


### String Inverter System

- » Limited by DC string design and sizes
- » Requires DC conduits, combiners and disconnects
- » Separate installation of inverter unit

### Enphase Energy System

- » Flexible placement and sizing of systems
- » All system wiring is AC
- » Inverters installed directly on module racking

Safety

- » Requires handling of high voltage DC wires 
- » Poses fire risks by DC arc faults
- » System does not de-energize during daytime
- » Not compliant with 2011 NEC arc-fault circuit protection requirement

- » All wiring is standard AC
- » No risk of DC arc faults
- » System automatically de-energizes when utility power is removed
- » Compliant with 2011 NEC

# Welcome to the next phase of solar



*"The Enphase system is, in some sense, the most important technology breakthrough solar has ever seen."*

**Dan Kammen, UC Berkeley,**  
Director of Renewable and Appropriate Energy Lab



## System Overview

Enphase Energy uses Silicon Valley innovations to rethink the way solar power is delivered. We offer a fully-integrated system that combines microinverter technology with advanced powerline networking and web-based software to create a smarter and more efficient solar array.



- 1 Enphase Microinverter
- 2 Envoy Communications Gateway
- 3 Enlighten Software

## 2 Envoy Communications Gateway



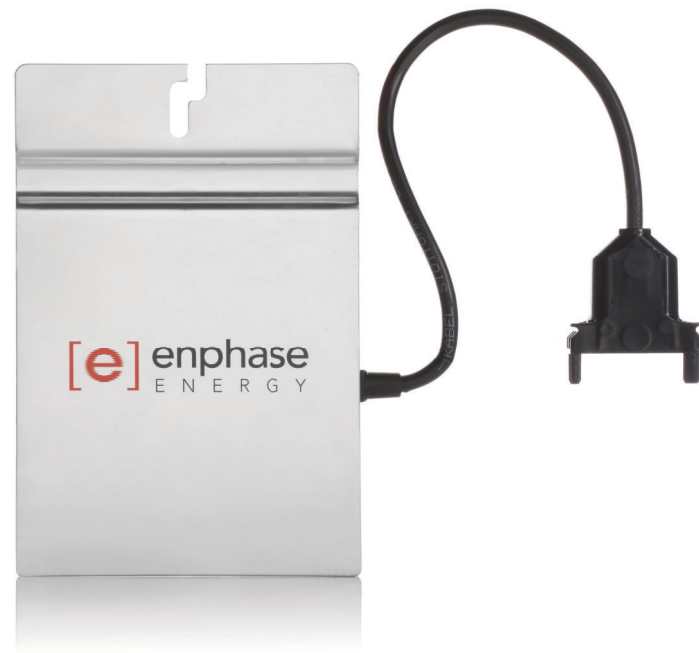
### Networking for Solar

The Envoy Communications Gateway connects the solar array to the Internet. The Envoy uses advanced powerline communications technology to monitor with each microinverter, without additional wiring or wireless configuration.

#### Features

- Plug & Play setup
- Communicates over existing electrical wires
- Monitors each microinverter in the array

## 1 Enphase Microinverter



### Distributed Power Conversion

Each Enphase Microinverter is connected to a single solar module and uses digital electronics to precisely perform DC-to-AC power conversion. This increases the overall energy output of the solar array by 5-25%.

#### Features

- Highly efficient conversion at all power levels
- Integrated monitoring & powerline communications
- Innovative cabling for fast and easy installation

## 3 Enlighten Software



### Web-Based Management

The Enlighten Software is a web-based monitoring and analytics service. It continuously monitors each part of the solar array, and notifies system owners and installers of any performance issues.

#### Features

- Multiple viewing modes and mobile device support
- Automatically identifies and diagnoses issues
- Included at no additional cost