

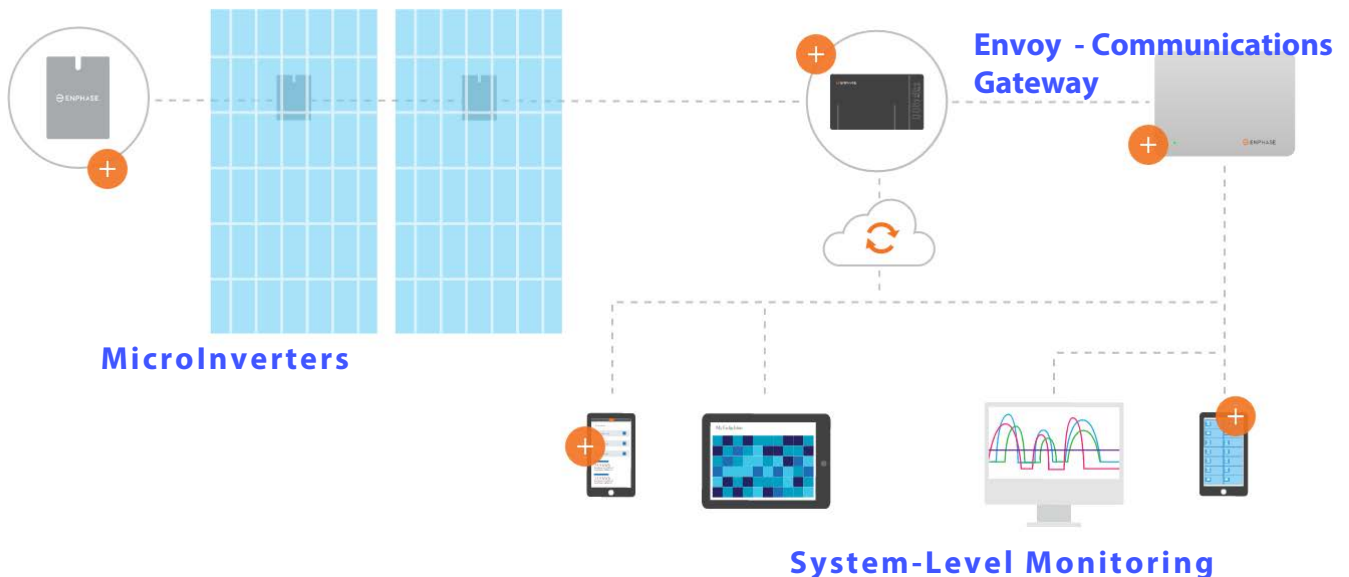
Monitoring your System

"With all-AC approach, this micro-inverter system simplifies design and installation while delivering optimal energy harvest. Designed to be used with 60-cell solar modules to minimize impact of shading."



Feature highlights:

- System-level production data
- Small, lightweight and easily installed
- View historical production and real-time production
- Automatic performance software updates
- Communication to internet via wireless Envoy
- Inverter efficiency of >97%
- Monitoring available through website portal and on mobile app



MyEnlighten

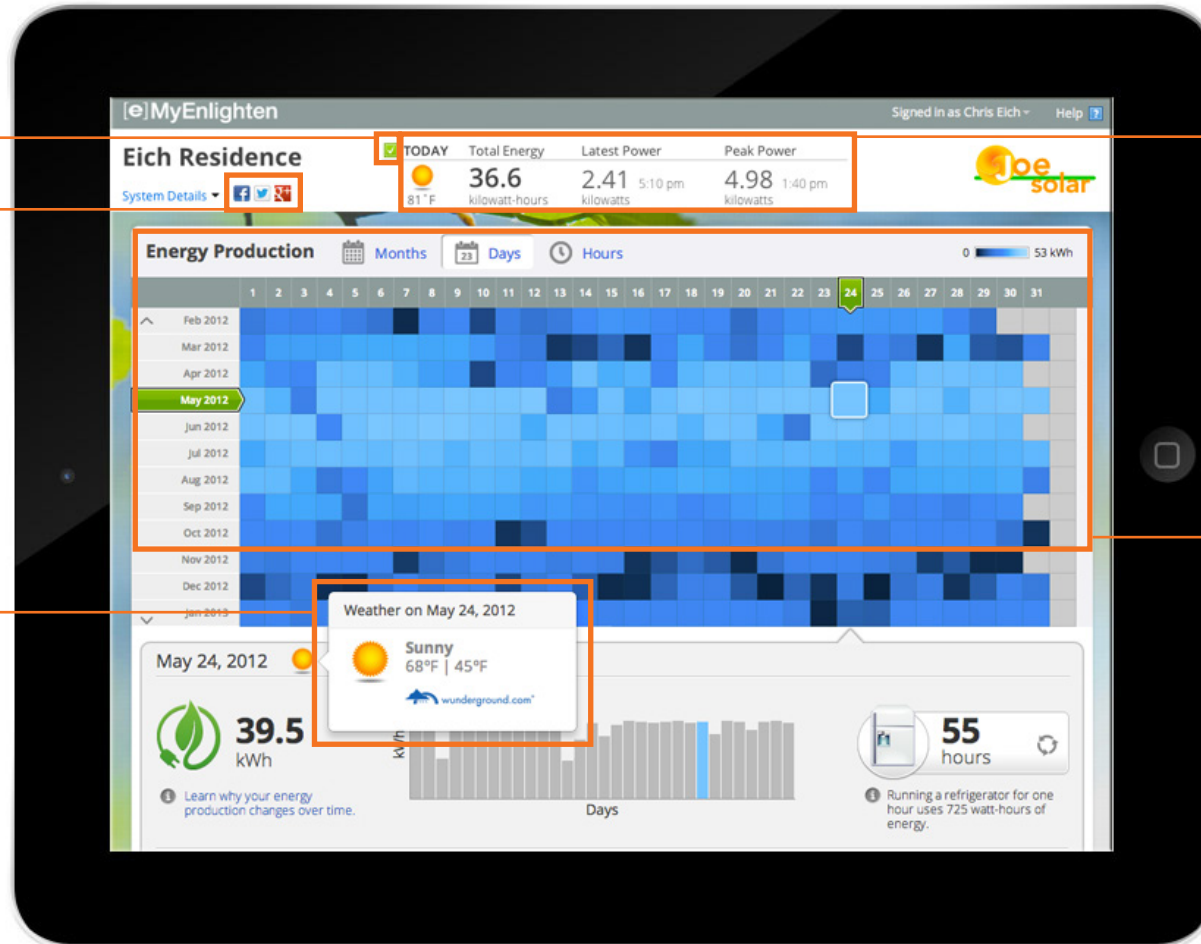
For System Owners

Designed for the system owner, **MyEnlighten** presents system energy production, overall health, historical performance, and energy equivalents. And it's all accessible on one simple, mobile-friendly display.

Confirm all is well with the System Status Indicator. If there's trouble, the Indicator shows the problem and provides troubleshooting tips.

Share easily using integrated social media buttons.

View historical weather data to understand variations in performance.



Verify today's performance at-a-glance.

View historical production data by days, months, or hours.

Envoy Communications Gateway™



The Enphase **Envoy® Communications Gateway** provides network access to the solar array enabling comprehensive monitoring and management of an Enphase system.

Solar professionals and system owners can easily check the status of their Enphase System using the Envoy's LCD display or get more detailed performance data via Enlighten® Software, included with purchase of Envoy.

SMART

- Includes web-based monitoring and control
- Integrates with smart energy devices
- Automatically upgrades and sends performance data

SIMPLE

- Plug and play installation
- Flexible network configuration
- No additional AC wiring required

SCALABLE

- Residential or commercial ready out of the box
- Supports up to 600 microinverters

INTERFACE

Power Line Communications	Enphase proprietary
Local Area Network (LAN)	10/100 auto-sensing, auto-negotiating, 802.3

LAN CONNECTION OPTIONS

Cable Assembly, Ethernet, RJ45, Orange, 10ft	Included with model ENV-120
Power line communication bridge pair	Optional, order EPLC-01
Wireless N USB adapter (802.11b/g/n)	Optional, order WF-01

POWER REQUIREMENTS

AC supply	120 VAC, 60 Hz
Power consumption	2.5 watts typical, 7 watts maximum

CAPACITY

Number of microinverters polled	Recommended up to 600
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MECHANICAL DATA

Dimensions (WxHxD)	222.5 mm x 112 mm x 43.2 mm (8.8" x 4.4" x 1.7")
Weight	340 g (12 oz.)
Ambient temperature range	-40°C to +65°C (-40° to 149°F)
Cooling	Natural convection—no fans
Enclosure environmental rating	Indoor NEMA 1

FEATURES

Standard warranty term	Two years
Compliance	UL 60950-1, EN 60950-1, CSA22.2 No. 60950-1 and IEC 60950-1, FCC Part 15 Class B
API available	System-level production data

Enphase **S280**



Designed for high-powered, 60-cell modules, the advanced grid-ready Enphase **S280 Microinverter™** is built on the fifth-generation platform and achieves the highest efficiency for module-level power electronics along with cost per watt reduction. With its all-AC approach, the S280 simplifies design and installation for 280 VA installations, and delivers optimal energy harvest. The S280 is compatible with storage systems, including battery management systems.

The Enphase S280 integrates seamlessly with the Enphase Envoy-S™ communications gateway, and Enphase Enlighten™ monitoring and analysis software.

PRODUCTIVE

- Optimized for higher-power, 60-cell modules
- Maximizes energy production
- Minimizes impact of shading, dust, and debris

SIMPLE AND RELIABLE

- No GEC needed for microinverter
- No DC design or string calculation required
- More than 1 million hours of testing
- Industry-leading warranty, up to 25 years

ADVANCED GRID READY

- Complies with fixed power factor, voltage and frequency ride-through requirements
- Remote updating to respond to changing grid requirements
- Configurable for variable grid profiles like Hawaiian Electric Company (HECO) Rule 14H, California Rule 21

Enphase S280 Microinverter // DATA

INPUT DATA (DC)	S280-60-LL-2-US, S280-60-LL-5-US	
Commonly used module pairings ¹	235 W - 365 W	
Maximum input DC voltage	48 V	
Peak power tracking voltage	27 V - 37 V	
Operating range	16 V - 48 V	
Min/Max start voltage	22 V / 48 V	
Max DC short circuit current	15 A	
OUTPUT DATA (AC)	208 VAC	240 VAC
Peak output power	280 VA	280 VA
Maximum continuous power	270 VA	270 VA
Nominal voltage/range ²	208 V / 183-229 V	240 V / 211-264 V
Nominal output current	1.30 A	1.13 A
Nominal frequency/range	60 / 57 - 61 Hz	60 / 57 - 61 Hz
Extended frequency range	57 - 63 Hz	57 - 63 Hz
Power factor at rated power	1.0	1.0
Maximum units per 20 A branch circuit	21 (three phase, balanced)	14 (single phase)
Maximum output fault current	663 mA rms, 100 ms	663 mA, 100 ms
Power factor (adjustable)	1 / 0.7 leading ... 0.7 lagging	1 / 0.7 leading ... 0.7 lagging
EFFICIENCY	208 VAC	240 VAC
CEC weighted efficiency	96.5 %	97.0 %
Peak inverter efficiency	96.8 %	97.3 %
MECHANICAL DATA		
Ambient temperature range	-40°C to +65°C	
Connector type	S280-60-LL-2-US: MC4 S280-60-LL-5-US: Amphenol H4	
Dimensions (WxHxD)	172 mm x 175 mm x 35 mm (without bracket)	
Weight	1.8 kg (4 lbs)	
Cooling	Natural convection - No fans	
Enclosure environmental rating	Outdoor - NEMA 6	
FEATURES		
Compatibility	60-cell PV modules	
Communication	Power line	
Integrated ground	The DC circuit meets the requirements for ungrounded PV arrays in NEC 690.35. Equipment ground is provided in the Engage Cable. No additional GEC or ground is required. Ground fault protection (GFP) is integrated into the microinverter.	
Monitoring	Enlighten Manager and MyEnlighten monitoring options	
Compliance	UL1741/IEEE1547, FCC Part 15 Class B, CAN/CSA-C22.2 NO. 0-M91, 0.4-04, and 107.1-01	

1. Suggestion only, inverter self limits DC inputs.

2. Nominal voltage range can be extended beyond nominal if required by the utility.

To learn more about Enphase Microinverter technology,
visit enphase.com

