

Enphase Commercial Solution

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Agenda

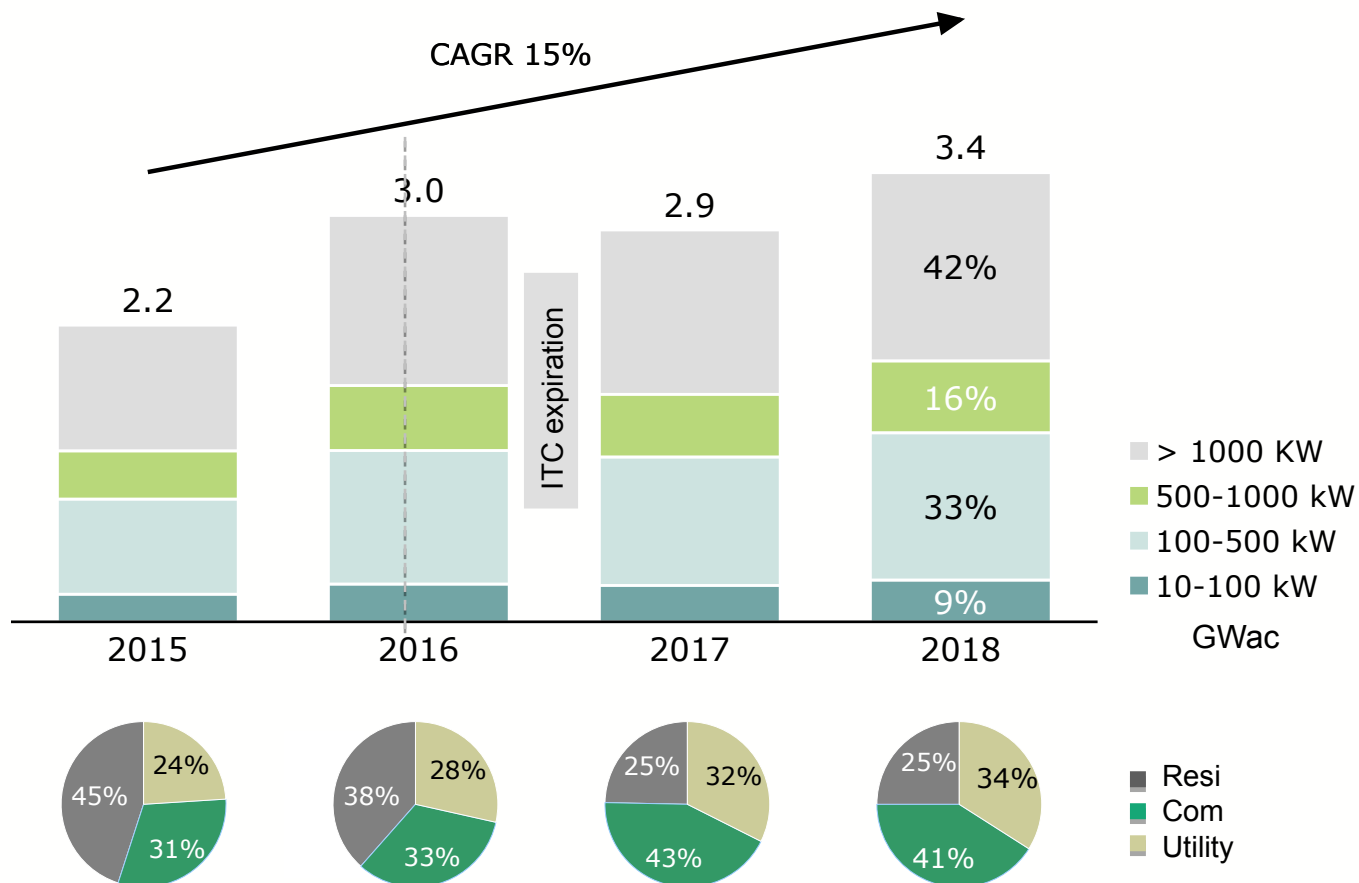
- **Commercial Market**
- **Enphase Commercial Solution**
- **System Comparisons**
- **Availability**

Enphase and Commercial



- Enphase has had significant success in commercial – over 6,800 installations from 10kW to over 2MW
- The Enphase 208Vac solution has been used extensively in the small commercial market.
- Enphase is now expanding to provide a total solution that includes a 480Vac system to address larger commercial projects.

The Commercial US TAM



Commercial Solution Overview

The Enphase Commercial Solution



The Enphase Commercial Solution

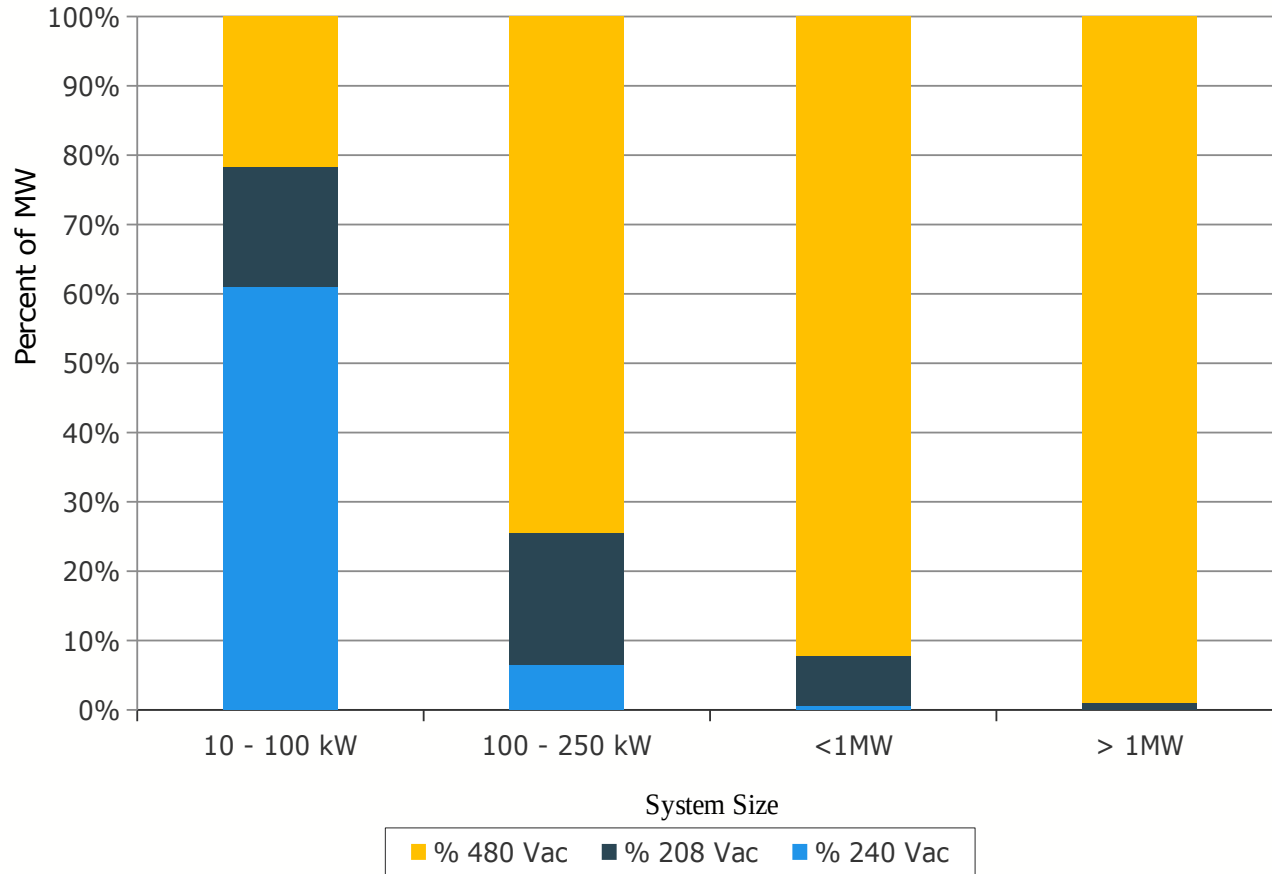
Solution

The Enphase 480V Commercial Solution combines the industry leading microinverter system with design, financing, and proactive O&M services to deliver superior system economics.

Key Benefits:

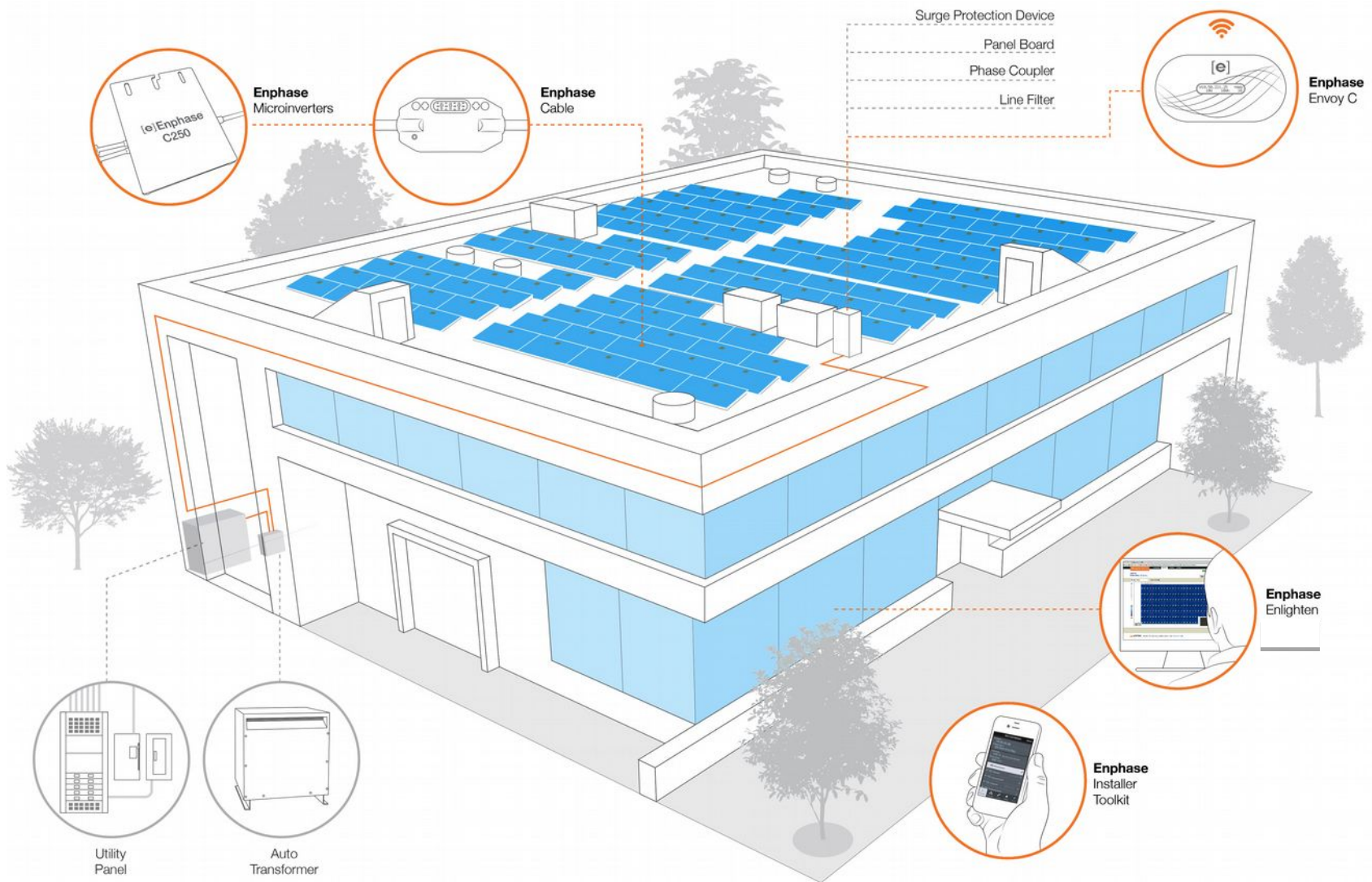
- Superior economics
 - 10% lower LCOE than string and central systems
 - Higher IRR and a better ROI
 - BoS savings+ increased energy harvest + warranty + O&M services
- System built for 480V, three phase systems, both 72 cell and 60 cell modules

The US Commercial Market



- **In systems above 100 kW, 480Vac systems dominate**

Enphase C250 480Vac System



C250 Microinverter System Benefits

Competitive CapEx

- Reduced microinverter costs
- BoS savings: 48 microinverters per branch circuit delivers labor and material savings due to longer and fewer system branches

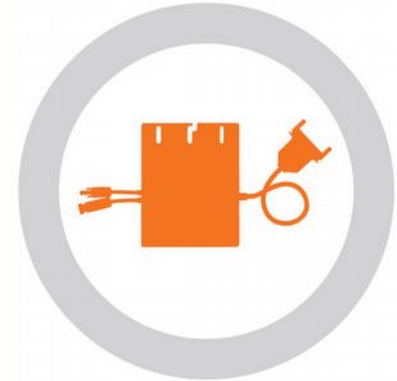
Increased energy harvest and system uptime

Reduced engineering time with no stringing calculations

Streamlined installer operations by avoiding costly inventorying of various inverter sizes

Lower operation and maintenance costs

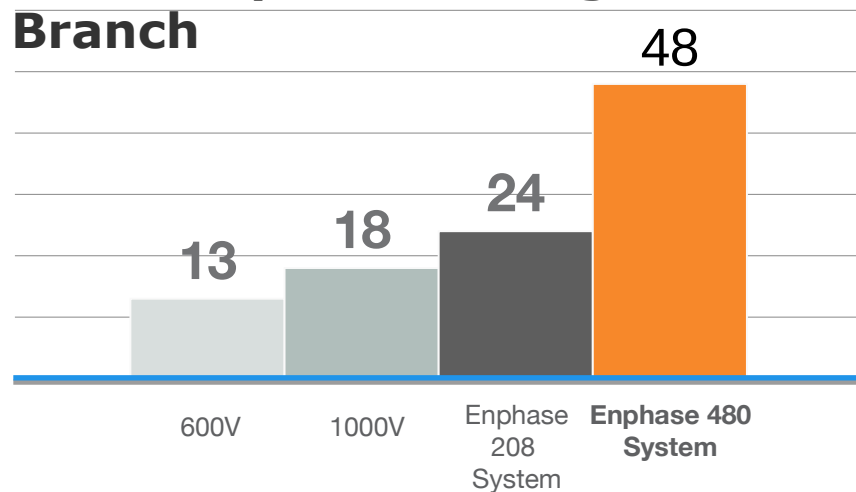
Microinverter available with either a 10 or 20 year warranty



Available
Q1 2015

C250 Microinverter System

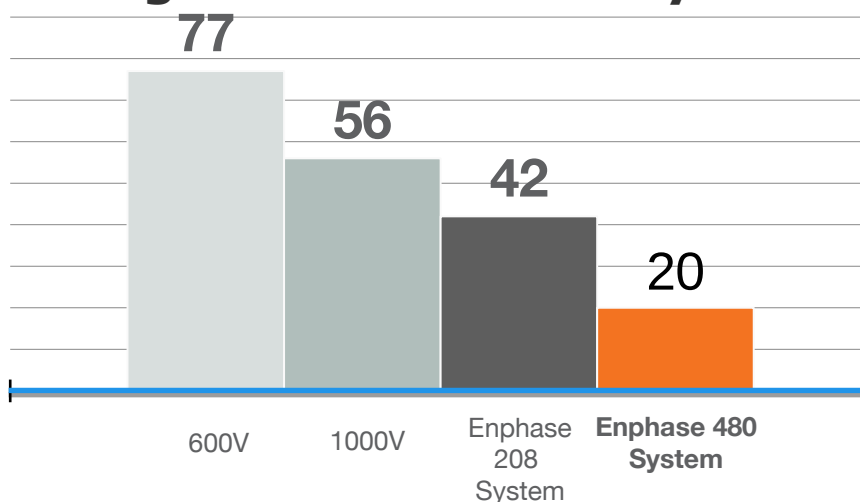
Modules per DC String/AC Branch



48 C250 Microinverters per AC branch and fewer branches per system means:

- Easier system design
- Lower BoS costs
- Reduced installation time

Strings for a 250kWdc System

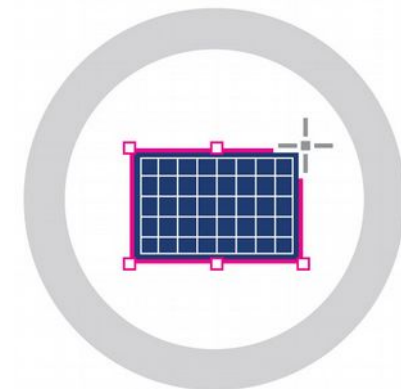


Design

Enphase is partnering with Folsom Labs to deliver an integrated engineering design solution for commercial projects.

- The C250 microinverter system is being integrated into the HelioScope design software
- System designs with resulting E-BOM and energy production estimates in just minutes
- Availability in Q1 2015

In addition, commercial design consultations are available with Enphase



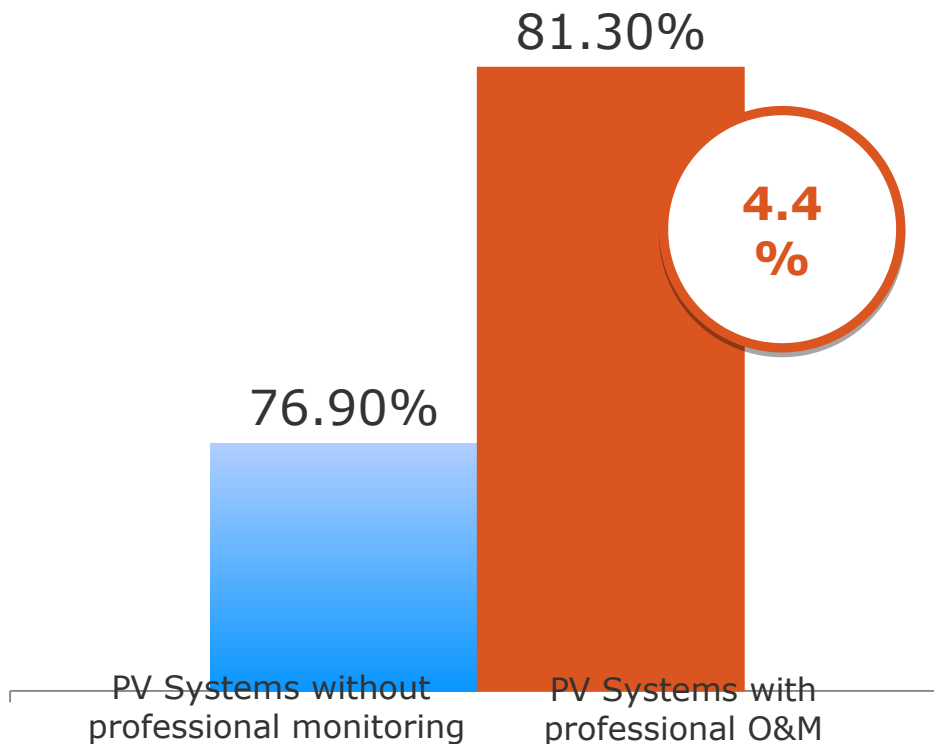
Financing

- Enphase connects commercial project stakeholders to appropriate finance partners:
 - Speeding the process of financing with providers who are familiar with the Enphase technology and value proposition.
- Current Finance Partners:
 - Connecticut Solar Lease Lease
 - Figtree Financing PACE
 - Kinaole Capital PPA
 - Mission Capital Fund Lease
 - Tech Credit Corp PPA
 - Village Power Finance PPA
 - Wiser Capital PPA



Professional O&M = Greater Performance Ratio

- PV Systems with professional O&M outperformed non-O&M PV systems by +4.4%



The Fraunhofer Institute supported this analysis with a projected yield loss without quality assurance of **-4.6%**

- ***PV-systems in Europe, Year of operation 2011, commissioned 2005-2010**

Professional O&M for Enphase Systems

Enphase Energy Services

Proactive, data-driven operations and maintenance capabilities, ensuring guaranteed system availability.

Why choose Enphase?

- Lower cost through higher efficiency and utilization
- Reduced risk through a guaranteed system up time
- Known expense with fixed annualized cost
- High quality support means great customer experience



Enphase Energy Services

- **Maximize your solar investment**

- 98.5% Uptime Guarantee



Asset
Management
and Reporting



Proactive
System
Maintenance



Preventative
Maintenance



Module
Cleaning



Technical
Support
Hotline

System Comparisons

System Comparisons

The C250 Microinverter System delivers a 10% lower LCOE vs. a central inverter system.

The C250 480Vac System is more efficient and lower BoS cost vs. the M250 208Vac system.

- 480Vac system lowers cost by \$0.05/W to \$0.10/W
- 480Vac system overall has ~4% efficiency improvement vs. 208Vac system

Present Value of Lifetime Benefits

Enphase overcomes a CapEx premium by combining higher output, and longer warranty, and lower OpEx costs

Enphase NPV per
Watt Difference

Note: Comparison of 300kW system

CapEx Comparison: 300kW System

Inverter cost disadvantage partially recovered through lower BoS, engineering and installation costs

Availability

Availability

C250 microinverter

- Available Q1 2015

Folsom Labs HelioScope software

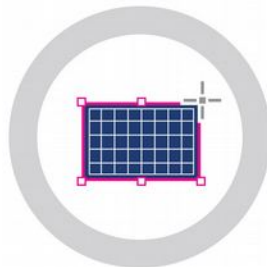
- Availability Q1 2015
 - 10% discount to all installers who purchase the C250 Microinverter System.

Financing Partnerships

- Ongoing

Enphase Energy Services for Commercial

- Available now



Summary

The Enphase Commercial Solution consists of the critical components for a successful project from design to operations and maintenance.

- Superior economics: 10% lower LCOE
- Ease of installation: 48 modules on a branch vs. 13 for string
- Peace of mind: 98.5% guaranteed uptime via Enphase Energy Services

Want more technical detail: www.enphase.com/webinars

- Look for the Learning on Demand link for the C250 webinar

Thank you.