



**High Efficiency Grid-Tied Kit**  
 Grape Solar poly-crystalline photovoltaic modules  
 Enphase M190 micro-inverters  
 UniRac mounting system

### Overview

The Grape Solar 440Watt Grid-Tied PV Kit can generate between 30kWh and 90kWh of electricity per month. This amount of power is equivalent to the energy consumption of 16 standard light bulbs. The kit consists of Grape Solar CS-P-220-DJ Poly-Si modules, Enphase microinverters and a roof-top racking system for mounting the modules.

This easy to install kit is designed with future expansion in mind. Start small, and generate a fraction of your power consumption, or upgrade and make the power company pay you. You can easily create a larger PV system by adding more kits at any time. Additional kits are easily connected to one another. Unlike other generators, there are no mechanical moving components in the Grape Solar 440Watt Grid-Tied Kit; therefore, maintenance is virtually non-existent.



### Applications

- Grid-tied solar power station
- Residential or Commercial
- Roof-top asphalt shingle mounts (other options available upon request)

### Warranty

#### Grape Solar Panels

- 10 year limited product warranty on materials and workmanship
- 10 year warranty on >90% power output
- 25 year warranty on >80% power output
- Refer to warranty document for detailed warranty information

#### Enphase Inverters

- 15 year limited product warranty on materials and workmanship

#### UniRac Racking

- 10 year limited product warranty on materials and workmanship

### Incentives

This kit is eligible for federal, state and local utility rebate/incentive programs. For more information visit <http://www.dsireusa.org> or call Grape Solar to locate a knowledgeable installer near you.

**[www.GrapeSolar.com](http://www.GrapeSolar.com)**  
 For service, support or qualified installers, please call  
**1-877-264-1014**

<b>Package Wattage (W)</b>	<b>440</b>
<b>PV Module</b>	<b>CS-P-220-DJ</b>
<b># of Modules</b>	<b>2</b>
<b>Inverter</b>	Enphase M190 Micro-Inverter
<b># of Inverters</b>	<b>2</b>
<b>Inverter Accessory</b>	-
<b>Racking System</b>	For array direct mounting on asphalt shingle pitch roof or curved tile roof. Wind load 85mph. Attachment Span 48".
168" Rail (Aluminum, Clear Anodized)	0
126" Rail (Aluminum, Clear Anodized)	0
84" Rail (Aluminum, Clear Anodized)	2
QuickMount for Composition, QMSC A.	4
UniRac Serrated L-Feet Clear Anodized	4
Grounding Lug with Mounting Hardware	2
UniRac Grounding Clip 1 (UGC-1)	2
Wiley Bonding Jumper	0
UniRac Clamp END "D" 38-40 mm Module, Clear Anodized	4
UniRac Clamp MID "A, B, C & D" Module, Clear Anodized	2
UniRac Standard Rail Splices	0
UniRac Bolt, 1/4"x 5/8", Flange Nut (Bag of 20) for micro-inverter attachment	2
AC Junction Box	1
Micro-inverter installation kit (EKIT)	1
<b>Roof Space Required for Array Direct Mounting (square feet)</b>	<b>36</b>
<b>Array Layout</b>	1 row of 2 panels
<b>Inverter String Sizing</b>	1 x 1

**Consult your local utility company for grid connection**

Grape Solar reserves the rights to modify these specifications without notice.