420-440W Residential AC Module

**SunPower® Maxeon® Technology**

Built specifically for use with the SunPower Equinox® system, the only fully integrated solar solution designed, engineered, and warranted by one company.

**Highest Power AC Density Available.**

The patented, solid-copper foundation Maxeon Gen 6 cell is over 5% larger than prior generations, delivering the highest efficiency AC solar panel available.¹

**Part of the SunPower Equinox® Solar System**

- Compatible with mySunPower™ monitoring
- Seamless aesthetics

**Factory-integrated Microinverter**

- Highest-power integrated AC module in solar
- Engineered and calibrated by SunPower for SunPower AC modules

**Highest Lifetime Energy and Savings**

Designed to deliver 60% more energy over 25 years in real-world conditions like partial shade and high temperatures.²

**Best Reliability, Best Warranty**

With more than 42.6 million and 15 GW modules deployed around the world, SunPower technology is proven to last. That’s why we stand behind our module and microinverter with the industry’s best 25-year Combined Power and Product Warranty.
## Electrical Data

<table>
<thead>
<tr>
<th>Inverter Model: Type H (Enphase IQ7HS)</th>
<th>@240 VAC</th>
<th>@208 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Output Power (VA)</td>
<td>384</td>
<td>369</td>
</tr>
<tr>
<td>Max. Continuous Output Power (VA)</td>
<td>384</td>
<td>369</td>
</tr>
<tr>
<td>Nom. (L–L) Voltage/Range (V)</td>
<td>240 / 211-264</td>
<td>208 / 183-229</td>
</tr>
<tr>
<td>Max. Continuous Output Current (Arms)</td>
<td>1.60</td>
<td>1.77</td>
</tr>
<tr>
<td>Max. Units per 20 A (L–L) Branch Circuit</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>CEC Weighted Efficiency</td>
<td>97.0%</td>
<td>96.5%</td>
</tr>
</tbody>
</table>

- Nom. Frequency: 60 Hz
- Extended Frequency Range: 47-68 Hz
- AC Short Circuit Fault Current Over 3 Cycles: 4.82 A rms
- Overvoltage Class AC Port: III
- AC Port Backfeed Current: 18 mA
- Power Factor Setting: 1.0
- Power Factor (adjustable): 0.85 (inductive) / 0.85 (capacitive)

## DC Power Data

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Nom. Power (Pnom) W</td>
<td>440</td>
<td>435</td>
<td>430</td>
<td>425</td>
</tr>
<tr>
<td>Power Tolerance</td>
<td>+5/-0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module Efficiency</td>
<td>22.8%</td>
<td>22.5%</td>
<td>22.3%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Temp. Coef. (Power)</td>
<td>-0.29% / °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shade Tolerance</td>
<td>Integrated module-level max. power point tracking</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Operating Conditions

- Operating Temp.: -40° F to +185°F (-40°C to +85°C)
- Max. Ambient Temp.: 122°F (50°C)
- Max. Test Load:
  - Wind: 125 psf, 6000 Pa, 611 kg/m² back
  - Snow: 187 psf, 9000 Pa, 917 kg/m² front
- Max. Design Load:
  - Wind: 75 psf, 3600 Pa, 367 kg/m² back
  - Snow: 125 psf, 6000 Pa, 611 kg/m² front
- Impact Resistance: 1 inch (25 mm) diameter hail at 52 mph (23 m/s)

## Mechanical Data

- Solar Cells: 66 Maxeon Gen 6
- Front Glass: High-transmission tempered glass with anti-reflective coating
- Environmental Rating: Outdoors rated
- Frame: Class 1 black anodized (highest AAMA rating)
- Weight: 48 lb (21.8 kg)
- Recommended Max. Module Spacing: 1.3 in. (33 mm)

## Packaging Configuration

- Modules per pallet: 25
- Packaging box dimensions: 75.4 x 42.2 x 48.0 in. (1915 x 1072 x 1220 mm)
- Pallet gross weight: 1300.7 lb (590 kg)
- Pallets per container: 32
- Net weight per container: 41,623 lb (18,880 kg)

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2. Maxeon 435 W, 22.5% efficient, compared to a Conventional Panel on same-sized arrays (260 W, 16% efficient, approx. 1.6 m²), 7.9% more energy per watt (based on PVSyst pan files for avg. US climate), 0.5%/yr slower degradation rate (Jordan, et. al. “Robust PV Degradation Methodology and Application.” PVSC 2018).
3. Voltage range can be extended beyond nominal if required by the utility.
4. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.
5. Factory set to IEEE 1547a-2014 default settings. CA Rule 21 default settings profile set during commissioning.
6. Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25°C). All DC voltage is fully contained within the module.
7. UL Listed as PVSE and conforms with NEC 2017 and NEC 2020 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors; when installed according to manufacturer’s instructions.
8. Please read the safety and installation instructions for more information regarding load ratings and mounting configurations.

See www.sunpower.com/company for more reference information.
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