MAXEON 6 AC SOLAR PANEL
410-425 W | Up to 22.0% Efficient

- Factory-integrated microinverter
- Black backsheet, black frame

More Lifetime Energy
Designed to maximise energy generation through leading efficiency, enhanced performance in high temperatures, and higher energy conversion in low-light conditions like mornings, evenings and cloudy days.

Uncompromising Reliability
Engineered to power through all types of weather conditions with crack-resistant cells and reinforced connections that protect against fatigue and corrosion. Each panel's microinverter enables independent panel operation to mitigate the impact of shade while improving system performance.

Superior Sustainability
Clean ingredients, responsible manufacturing, and lasting energy production for 40 years make SunPower Maxeon panels the most sustainable choice in solar.

The Industry’s Longest Warranty
SunPower Maxeon panels are covered by a 40-year warranty¹ backed by extensive third-party testing and field data from more than 33 million panels deployed worldwide.

- Product and power coverage: 40 Years
- Year 1 minimum warranted output: 98.0%
- Maximum annual degradation: 0.25%
- Microinverter limited product warranty covered by Enphase: 25 Years

Learn more about the SPR-MAX6-XXX-BLK-E4-AC
sunpower.maxeon.com
AC Electrical Data

- Inverter Model: IQ 7A @230 VAC
- Peak Output Power: 366 VA
- Max. Continuous Output Power: 349 VA
- Max. Continuous Output Current: 1.52 A
- Max. Units per 20 A (L–N) Branch Circuit: 10
- Weighted Efficiency\(^2\): 96.5%
- Nom. Frequency: 50 Hz
- Extended Frequency Range: 45-55 Hz
- AC Short Circuit Fault Current Over 3 Cycles: 5.8 A rms
- Overvoltage Class AC Port: III
- AC Port Backfeed Current: 18 mA
- Power Factor Setting: 1.0
- Power Factor (adjustable): 0.8 lead. / 0.8 lag.

DC Power Data

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<tbody>
<tr>
<td>SPR-MAX6-425-BLK-E4-AC</td>
<td>425 W</td>
<td>+5/0%</td>
<td>22.0%</td>
<td>-0.29%/°C</td>
<td>Integrated module-level max. power point tracking</td>
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<td>SPR-MAX6-415-BLK-E4-AC</td>
<td>415 W</td>
<td>+5/0%</td>
<td>21.5%</td>
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<tr>
<td>SPR-MAX6-410-BLK-E4-AC</td>
<td>410 W</td>
<td>+5/0%</td>
<td>21.2%</td>
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Mechanical Data

- Solar Cells: 66 Maxeon 6 Cells
- Tempered Glass: High-transmission tempered anti-reflective
- Environmental Rating: Microinverter Outdoor rated - IP67 (UL: NEMA type 6)
- Frame: Class 1 black anodized
- Weight: 21.8 kg

Tested Operating Conditions

- Operating Temp.: −40°C to +60°C
- Max. Ambient Temp.: 50°C
- Relative Humidity: 4% to 100% (Condensing)
- Max. Altitude: 2000 m
- Design Load\(^4\):
  - Wind: 3600 Pa, 367 kg/m² back
  - Snow: 5400 Pa, 551 kg/m² front
- Impact Resistance: 25 mm diameter hail at 23 m/s
- Microinverter enclosure: Class II double-insulated, corrosion resistant polymeric enclosure

Warranties, Certifications and Compliance

- Panel Warranties\(^1\):
  - 40-year limited power warranty
  - 40-year limited product warranty
- Microinverter Warranty:
  - 25-year limited product warranty covered by Enphase warranty\(^5\)
- Certifications and Compliance:
  - IEC 61215, 61730\(^6\)
  - IEC 62109-1, 62109-2
  - IEC 61000-6-3
  - AS4777.2, RCM
  - VDE-AR-N-4105
- Quality Management Certs:
- PID Test:
  - 1000 V: IEC 62804
- LeTID Test:
  - Draft version IEC 61215\(^7\)
- Available listing:
  - TÜV\(^6\), EnTest
- Green Building Certification Contribution:
  - Panels can contribute additional points towards LEED and BREEAM certifications
- EHS Compliance:
  - RoHS, OHSAS 18001:2007, REACH SVHC 201

1 40-year warranty is not available in all countries or all installations and requires registration, otherwise our 25-year warranty applies. Service availability varies by country and installation provider.
2 Tested per EN 50530 (EU).
3 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25°C), NREL calibration standard: SOMS current, LACCS FF and voltage. All DC voltage is fully contained within the module.
4 Safety factor 1.5 included.
5 AC modules shall be connected to Enphase Monitoring hardware (ENVOY) to enable Enphase product warranty.
6 Refer to the DC module, Class C fire rating per IEC 61730.
7 Panels degraded 0% in extended LeTID testing conducted by PVEL. Test report R10124977G-1,2020.

Made in Malaysia (Cells)
Assembled in Malaysia (Module)
Specifications included in this datasheet are subject to change without notice.
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