



Shingled Cell



AC Module



Black Backsheet
Black Frame



Residential



PERFORMANCE 3 AC

Power Range: 370 – 385 W

The new SunPower Performance 3 AC Modules combine enhanced full black shingling technology with the world's most advanced inverter technology. The result is an elegant, optimized solution for any roof.

Backed by an industry-leading warranty and an estimated 35-year useful life,¹ SunPower Performance panels wrap conventional front contact cells with 35 years of materials, engineering and manufacturing expertise to mitigate the reliability challenges of Conventional Panel design.

Factory-integrated Microinverter (MI)

- Integrated AC module
- 25-Year limited product warranty covered by Enphase
- Engineered by Enphase for SunPower AC modules



Durability that Translates to More Energy

Engineered to stand up to environmental stresses such as shading, daily temperature swings and high humidity, the SunPower Performance 3 panel delivers up to 7% more energy in the same space over 25 years compared to Conventional mono PERC Panels.²

A Track Record of Innovation Leadership

SunPower Performance panels represent the most deployed shingled cell panel in the industry—innovation protected by a growing portfolio of patents worldwide.³



4+ GW
Deployed



60+
Countries



90+
Patents

A Better Product. A Better Warranty.

Each SunPower Performance panel is manufactured with the confidence to deliver more energy and reliability over time—and backed for 25 years by the SunPower Complete Confidence Panel Warranty.

- Year 1 Minimum Warranted Power Output 98.0%
- Maximum Annual Degradation 0.45%
- Year 25 Minimum Warranted Power Output 87.2%

PERFORMANCE 3 AC Power: 370 – 385 W

AC Electrical Data	
Inverter Model: IQ 7A	@230 VAC
Peak Output Power	366 VA
Max. Continuous Output Power	349 VA
Nom. (L-N) Voltage/Range	219 – 264 V
Max. Continuous Output Current	1.52 A
Max. Units per 20 A (L-N) Branch Circuit	10
Weighted Efficiency ⁴	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				
	SPR-P3-385-BLK- E3-AC	SPR-P3-380-BLK- E3-AC	SPR-P3-375-BLK- E3-AC	SPR-P3-370-BLK- E3-AC
Nom. Power ⁵ (P _{nom})	385 W	380 W	375 W	370 W
Power Tol.	+5/0%	+5/0%	+5/0%	+5/0%
Module Efficiency	19.6%	19.4%	19.1%	18.9%
Temp. Coef. (Power)	-0.34%/°C			
Shade Tol.	Integrated module-level max. power point tracking			

Mechanical Data	
Solar Cells	Monocrystalline PERC
Front Glass	High-transmission tempered glass with anti-reflective coating
Junction Box	IP-68, PV4S, 3 bypass diodes
Environmental Rating	Microinverter Outdoor rated - IP67 (UL: NEMA type 6)
Frame	Class 1 black anodized
Weight	22.2 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
Max. Test Load	Wind: 2400 Pa, 245 kg/m ² back Snow: 5400 Pa, 550 kg/m ² front
Design Load ⁶	Wind: 1600 Pa, 163 kg/m ² back Snow: 3600 Pa, 367 kg/m ² 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	
Warranties	<ul style="list-style-type: none"> • 25-year limited power warranty • 25-year limited product warranty
Microinverter Warranty	<ul style="list-style-type: none"> • 25-year limited product warranty covered by Enphase warranty⁷
Certifications and Compliance	<ul style="list-style-type: none"> • IEC 61215, 61730⁸ • IEC 62109-1, 62109-2 • IEC 61000-6-3 • AS4777.2, RCM • IEC/ EN 50549-1:2019, G98/G99 • VDE-AR-N-4105
Quality Management Certs	ISO 9001:2004, ISO 14001:2008
PID Test	1000 V: IEC 62804
Available listing	TUV ⁸ , EnTest
EHS Compliance	OHSAS 18001:2007, Recycling Scheme

1 Performance panels expected useful life of 35 years. Source: "SunPower P-Series Technology Technical Review," Leidos Independent Engineer Report. 2016.

2 SunPower 385 W, 19.6% efficient, connected to an IQ7A, compared to a Conventional Panel on same-sized arrays (310 W mono PERC, 19% efficient, approx. 1.64 m²), 1% more energy per watt (based on PVSIM runs for avg EU climate), 0.1%/yr slower degradation rate (Based on Oct. 2020 review of warranties on manufacturer websites for top 20 manufacturers per IHS 2020) connected to a String Inverter.

3 Based on shipments as of Q2-2020.

4 Tested per EN 50530 (EU).

5 Measured at Standard Test Conditions (STC): irradiance of 1000 W/m², AM 1.5, and cell temperature 25° C.

6 Safety factor 1.5 included.

7 AC modules shall be connected to Enphase Monitoring hardware (ENVOY) to enable Enphase product warranty

8 Refer to DC module, Class C fire rating per IEC 61730.

Designed in U.S.A.

Assembled in China

Specifications included in this datasheet are subject to change without notice.

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