

SMART PANEL

Smart Panel

Monocrystalline PERC Panel with Half-cut Cell Technology and Integrated Power Optimiser For Australia

SPV345-R60LBMG - SPV365-R60LBMG



PV to grid solution including full service from SolarEdge

- Easy installation with panel pre-assembled power optimiser
- Optimised energy output by constantly tracking the maximum power point (MPPT) of each panel individually
- Panel-level voltage shutdown for installer and firefighter safety
- Full visibility of system performance from panel to grid
- Superior quality control with full automatic production line
- Excellent mechanical loading and shock resistance performance
- Elegant design with an all-black panel
- 12-year panel warranty and 25-year performance warranty
- Specifically designed to work with SolarEdge inverters

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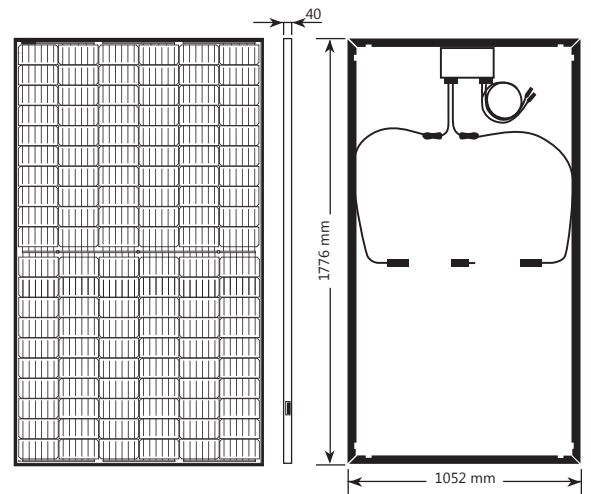
SPV345-R60LBMG - SPV365-R60LBMG

PANEL ELECTRICAL PROPERTIES

STC ⁽¹⁾	SPV345-R60LBMG	SPV350-R60LBMG	SPV355-R60LBMG	SPV360-R60LBMG	SPV365-R60LBMG	
Panel Power ⁽²⁾	345	350	355	360	365	W
Max. Power Voltage (Vmp)	34.2	34.4	34.6	34.8	35.0	V
Max. Power Current (Imp)	10.09	10.18	10.27	10.35	10.43	A
Open Circuit Voltage (Voc)	40.2	40.4	40.6	40.8	41.0	V
Short Circuit Current (Isc)	11.06	11.16	11.25	11.33	11.41	A
Maximum System Voltage			1000			Vdc
Maximum Series Fuse Rating			20			A
Panel Efficiency	18.5	18.7	19.0	19.3	19.5	%
Power Tolerance			0 ~ +5			W
NOCT ⁽²⁾						
Panel Power	255.6	259.3	263.0	266.7	270.4	W
Max. Power Voltage (Vmp)	31.6	31.8	32.0	32.1	32.3	V
Max. Power Current (Imp)	8.09	8.16	8.23	8.3	8.36	A
Open Circuit Voltage (Voc)	37.5	37.7	37.9	38.1	38.3	V
Short Circuit Current (Isc)	8.92	8.99	9.06	9.13	9.20	A

PANEL MECHANICAL PROPERTIES

Cells	120 (6 x 20)	
Cell Type	Monocrystalline PERC	
Cell Dimensions	166 x 83	mm
Dimensions (L x W x H)	1776 x 1052 x 40	mm
Front Side Maximum Load (Snow)	5400	Pa
Rear Side Maximum Load (Wind)	2400	Pa
Weight (with Power Optimiser)	20.7	kg
Front Glass	3.2mm, coated tempered glass	
Frame	Black anodized aluminium	
Junction Box	IP68, three diodes	
Connector Type	MC4	
Operating Temperature	-40 to +85	°C
Packaging Information (units per pallet)	26	



CERTIFICATIONS & WARRANTY

Panel Certifications	IEC 61215:2016, IEC61730:2016
Product Warranty	Power Optimiser — 25-year warranty, Panel — 12-year warranty
Output Warranty of Pmax	25-year linear panel warranty ⁽³⁾

TEMPERATURE CHARACTERISTICS

Temperature Coefficient Power (Pm)	-0.350	% / °C
Temperature Coefficient Voltage (Voc)	-0.270	% / °C
Temperature Coefficient Current (Isc)	0.048	% / °C
Operating Cell Temperature (NOCT)	45 ± 2	°C

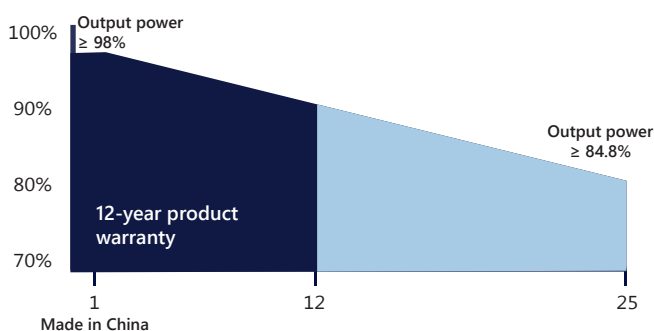
(1) STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5

(2) Power measuring tolerance is ±3%

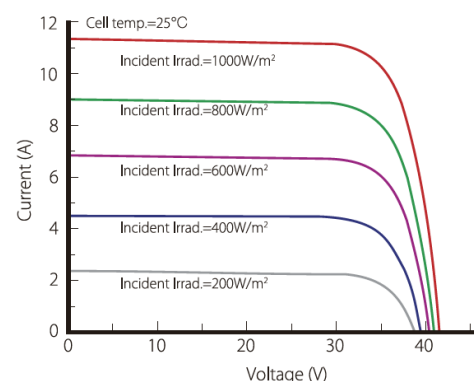
(3) NOCT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s

(4) 1st year: 98%, 84.8% power output over 25 years

Linear Warranty 12-Year Product Warranty + 25-Year Linear Power Warranty



Panel I-V Curve (SPV360-R60LBMG)



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POWER OPTIMISER PROPERTIES

INPUT

Rated Input DC Power	375	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	60	
MPPT Operating Range	8 - 60	Vdc
Maximum Short Circuit Current (Isc)	11.75	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overvoltage Category	II	

OUTPUT DURING OPERATION (POWER OPTIMISER CONNECTED TO OPERATING SOLAREEDGE INVERTER)

Maximum Output Current	15	Adc
Maximum Output Voltage	60	Vdc

OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)

Safety Output Voltage per Power Optimiser	1 ± 0.1	Vdc
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STANDARD COMPLIANCE

EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3	
Safety	IEC62109-1 (class II safety), UL1741	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	

INSTALLATION SPECIFICATIONS

Output Connector	MC4	
Output Wire Length	1.2 / 3.9	m / ft
Operating Temperature Range	-40 - +85 / -40 - +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 - 100	%

PV System Design Using a SolarEdge Inverter	Single Phase HD-Wave	Single Phase	Three Phase Residential ⁽⁴⁾	Three Phase Commercial	
Minimum String Length (Power Optimisers)	8		8 per array	16	
Maximum String Length (Power Optimisers)	25		25 per array	50	
Maximum Power per String	5700 (6000 with SE8000H, SE10000H)	5250	5700	11250 ⁽⁵⁾	W
Parallel Strings of Different Lengths or Orientations	Yes				
Notes			Connect 2 arrays		

(4) Optimisers must be connected in two separate arrays. For complete design guidelines for the three phase residential inverters refer to: https://www.solaredge.com/sites/default/files/three_phase_inverter_residential_design_installation_addendum_aus.pdf

(5) For the 230/400V grid: it is allowed to install up to 13,500W per string when the maximum power difference between each string is 2,000W