Smart Panel

Monocrystalline PERC Panel with Half-Cut Cell Technology and Integrated Power Optimiser

SPV370-R60JWMG, SPV375-R60JWMG

For Australia

SMART PANEL

PV to grid solution including full service from SolarEdge

- 25-year panel warranty and performance warranty
- Easy installation with panel pre-assembled Power Optimiser
- Optimized energy output by constantly tracking the maximum power point (MPPT) of each panel individually
- Panel-level voltage shutdown for installer and firefighter safety
- Specifically designed to work with SolarEdge inverters
- Full visibility of system performance from panel to grid
- Superior quality control with full automatic production line
- Excellent mechanical loading and shock resistance performance
- Detects abnormal PV connector behavior, preventing potential safety issues
- Faster installations with simplified cable management

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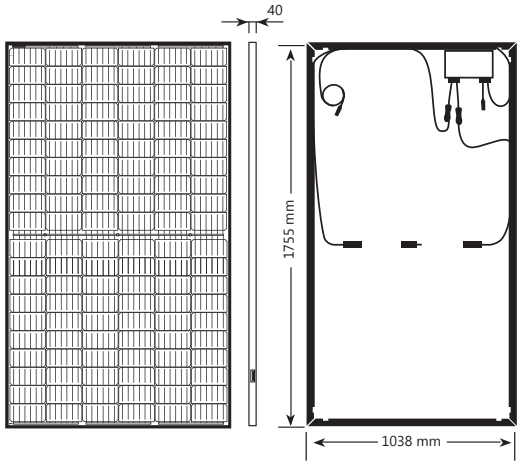
SPV370-R60JWMG, SPV375-R60JWMG

PANEL ELECTRICAL PROPERTIES

STC[1]	SPV370-R60JWMG	SPV375-R60JWMG	
Panel Power	370	375	W
Max. Power Voltage (Vmp)	34.08	34.28	V
Max. Power Current (Imp)	10.86	10.95	A
Open Circuit Voltage (Voc)	41.30	41.50	V
Short Circuit Current (Isc)	11.37	11.46	A
Maximum System Voltage	1000		Vdc
Maximum Series Fuse Rating	20		A
Panel Efficiency	20.31	20.59	%
NMOT[2]			
Panel Power	278.5	282.2	W
Max. Power Voltage (Vmp)	32.05	32.22	V
Max. Power Current (Imp)	8.69	8.76	A
Open Circuit Voltage (Voc)	38.99	39.18	V
Short Circuit Current (Isc)	9.15	9.23	A
Measurement Tolerance	±3%		Pmax
	±3%		Voc
	±5%		Isc

PANEL MECHANICAL PROPERTIES

Cells	120 (6 x 20)	
Cell Type	Monocrystalline PERC	
Cell Dimensions	166 x 83	mm
Dimensions (L x W x H)	1755 x 1038 x 40	mm
Front Side Maximum Load (Snow)	5400	Pa
Rear Side Maximum Load (Wind)	2400	Pa
Weight (with Power Optimiser)	20.2	kg
Front Glass	3.2mm, coated tempered glass	
Frame	Black anodized aluminum	
Junction Box	IP68, three diodes	
Connector Type	MC4 EVO2	
Operating Temperature	-40 to +85	°C
Packaging Information (units per pallet)	26	



CERTIFICATIONS & WARRANTY

Panel Certifications	IEC61215:2016, IEC61730:2016, AU listing CEC, Ammonia, PID, Salt-mist	
Product Warranty	Power Optimiser — 25-year warranty, Panel — 25-year warranty	
Output Warranty of Pmax	25-year linear panel warranty[3]	

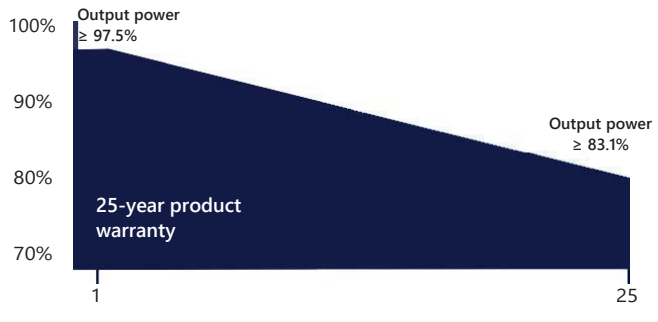
TEMPERATURE CHARACTERISTICS

Temperature Coefficient Power (Pm)	-0.37	% / °C
Temperature Coefficient Voltage (Voc)	-0.29	% / °C
Temperature Coefficient Current (Isc)	0.04	% / °C
Operating Cell Temperature (NOCT)	43 ± 2	°C

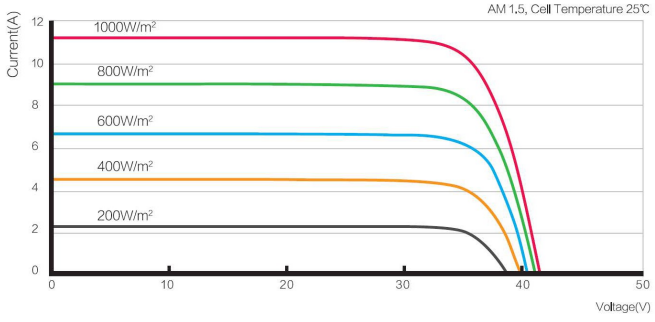
(1) STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5
(2) NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s
(3) 1st year: 97.5%, 83.1% power output over 25 years

Linear Warranty

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



Panel I-V Curve (SPV370-R60JWMG)



Made in China

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SPV370-R60JWMG, SPV375-R60JWMG

	S440	UNIT
INPUT		
Rated Input DC Power[1]	440	W
Absolute Maximum Input Voltage (Voc)	60	Vdc
MPPT Operating Range	8 - 60	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Panel	14.5	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.6	%
Overvoltage Category	II	
OUTPUT DURING OPERATION		
Maximum Output Current	15	Adc
Maximum Output Voltage	60	Vdc
OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM INVERTER OR INVERTER OFF)		
Safety Output Voltage per Power Optimiser	1 ± 0.1	Vdc
STANDARD COMPLIANCE		
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3, CISPR11, EN-55011	
Safety	IEC62109-1 (class II safety), UL1741	
Material	UL94 V-0, UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	129 x 153 x 30	mm
Weight (including cables)	655	gr
Input Connector	MC4[2]	
Input Wire Length	0.1	m
Output Connector	MC4	
Output Wire Length	(+) 2.3, (-) 0.10	m
Operating Temperature Range[3]	-40 to +85	˚C
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 - 100	%

(1) Rated power of the panel at STC will not exceed the Power Optimiser Rated Input DC Power. Panels with up to +5% power tolerance are allowed
(2) For other connector types please contact SolarEdge
(3) For ambient temperature above +70°C / +158°F power de-rating is applied. Refer to Power Optimisers Temperature De-Rating Technical Note for more details

PV System Design Using a SolarEdge Inverter		Single Phase HD-Wave	Single Phase	Three Phase Residential	Three Phase Commercial	
Minimum String Length (Power Optimisers)	S440	8		9	16	
Maximum String Length (Power Optimisers)		25		25	50	
Maximum Nominal Power per String[4]		5700 (6000 with SE8000H, SE10000H)	5250	5625	11250[5]	W
Parallel Strings of Different Lengths or Orientations		Yes				

(4) If the inverters rated AC power ≤ maximum nominal power per string, then the maximum power per string will be able to reach up to the inverters maximum input DC power Refer to: https://www.solaredge.com/sites/default/files/se-single-string-power-optimizer-application-note-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
(6) It is not allowed to mix SPVxxx-R60DWMG and SPVxxx-R60JWMG in new installations

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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