# **Smart Panel**

# Monocrystalline PERC Panel with Split Cell Technology and Integrated Power Optimiser

SPV370-R60DWMG - SPV375-R60DWMG



# SMART PANEL

### PV to grid solution including full service from SolarEdge

- 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
- 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 black frame
- 15-year panel warranty and 25-year performance warranty
- Specifically designed to work with SolarEdge inverters



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PANEL ELECTRICAL PROPERTIES				
STC <sup>(1)</sup>	SPV370-R60DWMG	SPV375-R60DWMG		
Panel Power	370	375	W	
Max. Power Voltage (Vmp)	33.95	34.10	V	
Max. Power Current (Imp)	10.91	11.01	A	
Open Circuit Voltage (Voc)	41.72	41.89	V	
Short Circuit Current (Isc)	11.32	11.43	А	
Maximum System Voltage	1000	)	Vdc	
Maximum Series Fuse Rating	20		А	
Panel Efficiency	19.80	20.07	%	
Power Bin Sorting	0 ~ +	-5	W	
Power Production Tolerance	+/- 3		%	
NOCT <sup>(2)</sup>			·	
Panel Power	277	281	W	
Max. Power Voltage (Vmp)	31.17	31.30	V	
Max. Power Current (Imp)	8.90	8.98	А	
Open Circuit Voltage (Voc)	38.86	38.86 39.02		
Short Circuit Current (Isc)	9.30	9.39	А	

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)	22*	kg	
Front Glass	3.2mm, coated tempered glass		
Frame	Black anodized aluminium		
Junction Box	IP68, three diodes		
Connector Type	Genuine MC4		
Fire Safety Class	Class C		
Operating Temperature	-40 to +85	°C	
Packaging Information (units per pallet)	26		

<sup>1755</sup> mm 1038 mm

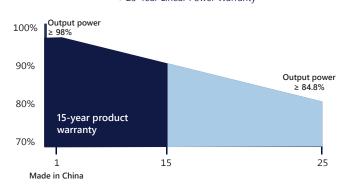
<sup>\*</sup> The dimensions and weight displayed in this table apply to modules manufactured from February 2021 (SPVxxx-R60DWMG-2M2C01). Modules manufactured prior to February 2021 (SPVxxx-R60DWMG-2C01) have dimensions of 1776  $\times$  1052  $\times$  40 mm and weigh 23.0 kg

CERTIFICATIONS & WARRANTY		
Panel Certifications	IEC61215:2016, IEC61730:2016, AU listing CEC, Ammonia, PID, Salt-mist	
Product Warranty	Power Optimiser — 25-year warranty, Panel — 15-year warranty	
Output Warranty of Pmax	25-year linear Panel warranty <sup>(3)</sup>	
TEMPERATURE CHARACTERISTICS		
Temperature Coefficient Power (Pm)	-0.364	%/℃
Temperature Coefficient Voltage (Voc)	-0.281	%/°C
Temperature Coefficient Current ( Isc)	0.039	%/°C
Operating Cell Temperature (NOCT)	45 ± 2	°C

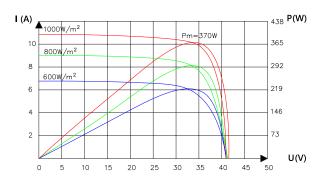
- (1) STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 (2) NOCT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s (3) 1st year: 98%, 84.8% power output over 25 years

### **Linear Warranty**

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



### Panel I-V Curve (SPV370-R60DWMG)



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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		
<b>OUTPUT DURING OPERATION (POWER OPTI</b>	MISER CONNECTED TO OPERATING SOLAREDGE INVERTER)	
Maximum Output Current	15	Adc
Maximum Output Voltage	60	Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIS</b>	ER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLARED	GE 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	
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 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA6P	

PV System Design Using a SolarEdge Inverter	Single Phase HD-Wave	Single Phase	Three Phase	Three Phase for 277/480 Grid	
Minimum String Length (Power Optimiser) <sup>(5)</sup>	8		16	18	
Maximum String Length (Power Optimisers)	25		50		
Maximum Power per String	5700	5250	11250 <sup>(6)</sup>	12750 <sup>(7)</sup>	W
Parallel Strings of Different Lengths or Orientations	Yes				

<sup>(5)</sup> Smart Panels cannot be used with the SE3K three phase inverter (available in some countries; refer to the three phase inverter SE3K-SE10K datasheet)
(6) For the 230/400V grid: it is allowed to install up to 13,500W per string when the maximum power diference between each string is 2,000W
(7) For the 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power diference between each string is 2,000W