

# Smart Module

## Monocrystalline PERC Module with Half-Cut Cell Technology and Integrated Power Optimizer

SPV355-R60DBMG, SPV360-R60DBMG, SPV370-R60DBMG

SMART MODULE



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

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

[solaredge.com](https://solaredge.com)

**solar**edge

\*Applicable for P/N SPV3xx-R60DBMG-6M4Cxx

# Smart Module

## Monocrystalline PERC Module with Half-Cut Cell Technology and Integrated Power Optimizer

SPV355-R60DBMG, SPV360-R60DBMG, SPV370-R60DBMG

### MODULE ELECTRICAL PROPERTIES

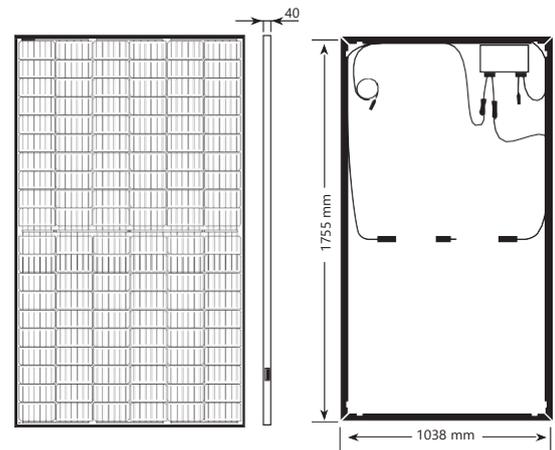
Applicable to SPV with P/N	SPV355-R60DBMG-6M4Cxx	SPV360-R60DBMG-6M4C	SPV370-R60DBMG-6M4Cxx	
<b>STC<sup>(1)</sup></b>				
Module Power	355	360	370	W
Max. Power Voltage (Vmp)	33.74	33.87	34.17	V
Max. Power Current (Imp)	10.53	10.63	10.83	A
Open Circuit Voltage (Voc)	41.51	41.66	41.96	V
Short Circuit Current (Isc)	10.96	11.07	11.29	A
Maximum System Voltage		1000		Vdc
Maximum Series Fuse Rating		20		A
Module Efficiency	19.0	19.27	20.31	%
Power Measurement Tolerance		0 ~ +5		W
<b>NOCT<sup>(2)</sup></b>				
Module Power	266	270	277	W
Max. Power Voltage (Vmp)	30.97	31.09	31.37	V
Max. Power Current (Imp)	8.59	8.67	8.84	A
Open Circuit Voltage (Voc)	38.66	38.80	39.08	V
Short Circuit Current (Isc)	9.01	9.10	9.28	A

### MODULE 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 Optimizer)	22*	kg
Front Glass	3.2mm, coated tempered glass	
Frame	Black anodized aluminum	
Junction Box	IP68, three diodes	
Connector Type	Staubli MC4	
Operating Temperature	-40 to +85	°C
Packaging Information (units per pallet)	26	

\* The dimensions and weight displayed in this table apply to modules manufactured from February 2021.

Modules manufactured prior to February 2021 (SPVxxx-R60DBMG-2C01) have dimensions of 1776 x 1052 x 40 mm and weigh 23.0 kg



### CERTIFICATIONS & WARRANTY

Module Certifications	IEC61215:2016, IEC61730:2016, AU listing CEC, Ammonia, PID, Salt-mist
Product Warranty	Power Optimizer — 25-year warranty, Module — 25-year warranty
Output Warranty of Pmax	25-year linear module warranty <sup>(3)</sup>

### TEMPERATURE CHARACTERISTICS

	SPV355-R60DBMG / SPV360-E60DBMG	SPV370-E60DBMG	
Temperature Coefficient Power (Pm)	-0.364	-0.328	% / °C
Temperature Coefficient Voltage (Voc)	-0.281	-0.265	% / °C
Temperature Coefficient Current (Isc)	0.039	0.0487	% / °C
Operating Cell Temperature (NOCT)	45 ± 2		°C

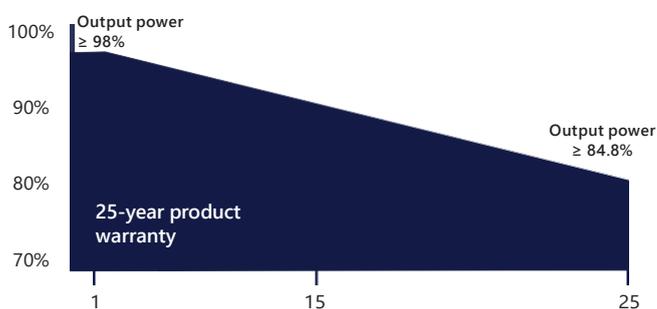
(1) STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5

(2) NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s

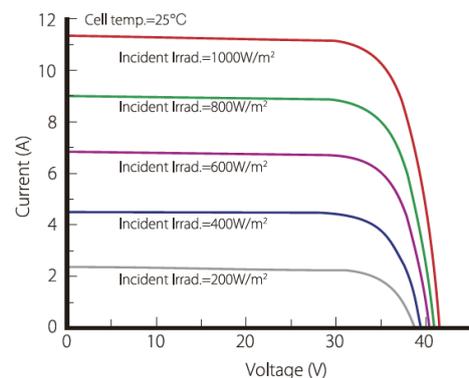
(3) 1st year: 98%, 84.8% power output over 25 years

#### Linear Warranty

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



#### Module I-V Curve (SPV360-R60DBMG)



# / Smart Module

## Monocrystalline PERC Module with Half-Cut Cell Technology and Integrated Power Optimizer

SPV355-R60DBMG-6M4Cxx, SPV360-R60DBMG-6M4Cxx, SPV370-R60DBMG-6M4Cxx

POWER OPTIMIZER PROPERTIES		
<b>INPUT</b>		
Rated Input DC Power	440	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	60	Vdc
MPPT Operating Range	8 - 60	Vdc
Maximum Short Circuit Current (Isc)	14.5	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.6	%
Overvoltage Category	II	
<b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)</b>		
Maximum Output Current	15	Adc
Maximum Output Voltage	60	Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)</b>		
Safety Output Voltage per Power Optimizer	1 ± 0.1	Vdc
<b>STANDARD COMPLIANCE</b>		
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3, CISPR11, EN-55011	
Safety	IEC62109-1 (class II safety), UL1741	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
<b>INSTALLATION SPECIFICATIONS</b>		
Output Connector	MC4	
Output Wire Length	(+) 2.3, (-) 0.10	m
Operating Temperature Range	-40 to +85	
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 - 100	

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 Optimizer) <sup>(4)</sup>	8		16	18	
Maximum String Length (Power Optimizers)	25			50	
Maximum Power per String	5700	5250	11250 <sup>(5)</sup>	12750 <sup>(6)</sup>	W
Parallel Strings of Different Lengths or Orientations	Yes				

<sup>(4)</sup> Smart modules cannot be used with the SE3K three phase inverter (available in some countries; refer to the three phase inverter SE3K-SE10K datasheet)

<sup>(5)</sup> 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

<sup>(6)</sup> For the 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W

\*Its not allowed to mix SPVxxx-R60DBMG-2M2Cxx and SPVxxx-R60DBMG-6M4Cxx in new installations