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

SPV355-R60LWMG - SPV375-R60LWMG



### 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
- I Elegant design with black frame
- I 12-year panel warranty and 25-year performance warranty
- Specifically designed to work with SolarEdge inverters



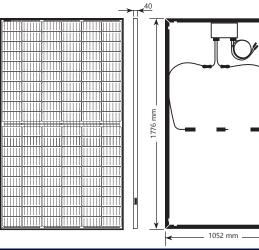
## Smart Panel Monocrystalline PERC Panel with Half-cut **Cell Technology and Integrated Power Optimiser** For Australia

### SPV355-R60LWMG - SPV375-R60LWMG

#### PANEL ELECTRICAL PROPERTIES

| STC <sup>(1)</sup>          | SPV355-R60LWMG | SPV360-R60LWMG | SPV365-R60LWMG | SPV370-R60LWMG | SPV375-R60LWMG |     |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|-----|
| Panel Power <sup>(2)</sup>  | 355            | 360            | 365            | 370            | 375            | W   |
| Max. Power Voltage (Vmp)    | 33.8           | 34.0           | 34.2           | 34.4           | 34.6           | V   |
| Max. Power Current (Imp)    | 10.51          | 10.59          | 10.68          | 10.76          | 10.84          | Α   |
| Open Circuit Voltage (Voc)  | 40.3           | 40.5           | 40.7           | 40.9           | 41.1           | V   |
| Short Circuit Current (Isc) | 11.25          | 11.35          | 11.43          | 11.52          | 11.60          | Α   |
| Maximum System Voltage      | 1500           |                |                |                |                | Vdc |
| Maximum Series Fuse Rating  | 20             |                |                |                |                | Α   |
| Panel Efficiency            | 19.0           | 19.3           | 19.5           | 19.8           | 20.1           | %   |
| Power Tolerance             | 0 ~ +5         |                |                |                |                | W   |
| NOCT <sup>(3)</sup>         |                |                |                |                |                |     |
| Panel Power                 | 263.0          | 266.7          | 270.4          | 274.1          | 277.8          | W   |
| Max. Power Voltage (Vmp)    | 31.2           | 31.4           | 31.6           | 31.8           | 32.0           | V   |
| Max. Power Current (Imp)    | 8.43           | 8.49           | 8.56           | 8.63           | 8.69           | Α   |
| Open Circuit Voltage (Voc)  | 37.6           | 37.8           | 38.0           | 38.2           | 38.4           | V   |
| Short Circuit Current (Isc) | 9.07           | 9.15           | 9.22           | 9.29           | 9.35           | 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<br>(Snow)        | 5400                         | Pa |
| Rear Side Maximum Load<br>(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 EVO 2                    |    |
| Operating Temperature                    | -40 to +85                   | °C |
| Packaging Information (units per pallet) | 26                           |    |



| <b>CERTIFICATIONS &amp; WARRANTY</b>   |   |      |
|--|---|------|
| Panel Certifications                   | IEC 61215:2016, IEC61730:2016                                   |      |
| Product Warranty                       | Power Optimiser — 25-year warranty,<br>Panel — 12-year warranty |      |
| Output Warranty of Pmax                | 25-year linear panel warranty <sup>(4)</sup>                    |      |
| 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   |

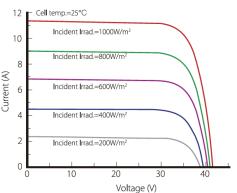
(1) STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5

(2) Power measuring tolerance is  $\pm$ 3% (3) NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s

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







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| POWER OPTIMISER PROPERTI                                   | ES   |         |
|--|--|---------|
| 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 Effeciency   | 99.5   | %       |
| Weighted Effeciency  | 98.8   | %       |
| Overvoltage Category                                       | II   |         |
| OUTPUT DURING OPERATION                                    | (POWER OPTIMISER CONNECTED TO OPERATING SOLAREDGE INVERTER)    |         |
| Maximum Output Current                                     | 15   | Adc     |
| Maximum Output Voltage                                     | 60   | Vdc     |
| OUTPUT DURING STANDBY (P<br>INVERTER OFF)                  | OWER OPTIMISER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLARED | GE      |
| Safety Output Voltage per Power Optimiser                  | 1 ± 0.1  | Vdc     |
| 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 SPECIFICATION                                 | ٧S   |         |
| 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<br>HD-Wave               | Single Phase | Three Phase<br>Residental <sup>(5)</sup> | Three Phase<br>Commercial |   |
|---|---------------------------------------|--------------|--|---------------------------|---|
| Minimum String Length (Power Optimisers)              | 8                                     |              | 8 per array                              | 16                        |   |
| Maximum String Length<br>(Power Optimisers)           | 25                                    |              | 25 per array                             | 50                        |   |
| Maximum Power per String                              | 5700 (6000 with<br>SE8000H, SE10000H) | 5250         | 5700                                     | 11250(6)                  | W |
| Parallel Strings of Different Lengths or Orientations | Yes                                   |              |  |                           |   |
| Notes   |                                       |              | Connect 2 arrays                         |                           |   |

(5) Optmisers 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

(6) 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