Smart Module

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

SPV370-R60JWMG, SPV375-R60JWMG



SMART MODULE

PV to grid solution including full service from SolarEdge

- 25-year module warranty and performance warranty
- 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
- Specifically designed to work with SolarEdge inverters

- Full visibility of system performance from module 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

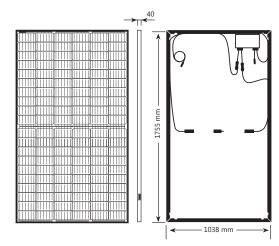


/ Smart Module

SPV370-R60JWMG, SPV375-R60JWMG

| STC ⁽¹⁾ | SPV370-R60JWMG | SPV375-R60JWMG | |
|-----------------------------|----------------|----------------|----------|
| Module Power | 370 | 375 | W |
| Max. Power Voltage (Vmp) | 34.08 | 34.28 | V |
| Max. Power Current (Imp) | 10.86 | 10.95 | А |
| Open Circuit Voltage (Voc) | 41.30 | 41.50 | V |
| Short Circuit Current (Isc) | 11.37 | 11.46 | А |
| Maximum System Voltage | 10 | 1000 | |
| Maximum Series Fuse Rating | | 20 | |
| Module Efficiency | 20.31 | 20.59 | % |
| NMOT ⁽²⁾ | | | <u> </u> |
| Module Power | 278.5 | 282.2 | W |
| Max. Power Voltage (Vmp) | 32.05 | 32.05 32.22 | |
| Max. Power Current (Imp) | 8.69 8.76 | | А |
| Open Circuit Voltage (Voc) | 38.99 | 39.18 | V |
| Short Circuit Current (Isc) | 9.15 | 9.23 | Α |
| | ±3% | | Pmax |
| Measurement Tolerance | ±3% | | Voc |
| | ±5% | | Isc |

| 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) | 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 | |



| Module Certifications | Power Ontimizer — 25-year warranty | |
|---------------------------------------|---|------|
| Product Warranty | | |
| Output Warranty of Pmax | 25-year linear module 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 |
| remperature coefficient current (13c) | *** | |

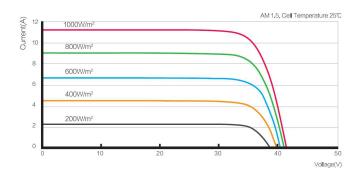
- (1) STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 (2) NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s
- (3) 1st year: 97.5%, 83.1% power output over 25 years

Linear Warranty

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



Panel I-V Curve (SPV370-R60JWMG)



/ Smart Module

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 Module | 14.5 | | |
| 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 OPTIMIZER DISC | CONNECTED FROM INVERTER OR INVERTER OFF) | | |
| Safety Output Voltage per Power Optimizer | 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 | | |
| Dimensions (W x L x H) | 129 x 153 x 30 | | |
| Weight (including cables) | 655 / 1.5 | | |
| Input Connector | MC4 ⁽²⁾ | | |
| Input Wire Length | 0.1 | | |
| Output Connector | MC4 | | |
| Output Wire Length | (+) 2.3, (-) 0.10 | | |
| Operating Temperature Range ⁽³⁾ | -40 to +85 | °C | |
| Protection Rating | IP68 / NEMA6P | | |
| Relative Humidity | 0 - 100 | % | |
| | | | |

⁽¹⁾ Rated power of the module at STC will not exceed the Power Optimizer Rated Input DC Power; Modules with up to +5% power tolerance are allowed

 $⁽³⁾ For ambient temperature above +70^{\circ}C / +158^{\circ}F power de-rating is applied. Refer to Power Optimizers \\ \underline{\text{Temperature De-Rating Technical Note}} for more details \\ \underline{\text{Tempera$

| PV System Design Using a Inverter | a SolarEdge | Single Phase HD-Wave | Single Phase | Three Phase | Three Phase for 277/480V grid | |
|--|------------------|-------------------------|--------------|-------------|----------------------------------|---|
| Minimum String Length (Power Optimizers) | S440 | 8 | | 16 | 18 | |
| Maximum String Length (Power Optimizers) | | 25 | | 50 | | |
| Maximum Nominal Power per Strin | g ⁽⁴⁾ | 5700 | 5250 | 11250(5) | 12750(6) | 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-power-optimizer-single-string-design-application-note.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) 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
(7) It is not allowed to mix SPVxxx-R60DWMG and SPVxxx-R60JWMG in new installations

⁽²⁾ For other connector types please contact SolarEdge

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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