



**BR72  
CEC  
LISTED**

## **AN ENERGIZED ROOF**

UPGRADE YOUR ROOF WITH DURABLE,  
FRAMELESS SOLAR PANELS

### WHO WE ARE

MERLIN® manufactures sustainable solar energy solutions for commercial, industrial and residential roofing, as well as transportation, portable and wearable applications. We believe that our unique solar energy solutions will make the world rethink what solar energy is capable of.

### IS YOUR ELECTRICITY BILL SOARING HIGH?

Our solar panels can reduce, or even eliminate, your electricity bill with its enhanced energy output and efficiency. The simple snap-on application makes the installation process inexpensive and quick. Our extremely light construction can eliminate the need to make structural enhancements to existing roofs. The frameless, low-profile design gives your roof a superior look while maintaining its durability.

### MERLIN® ADVANTAGES

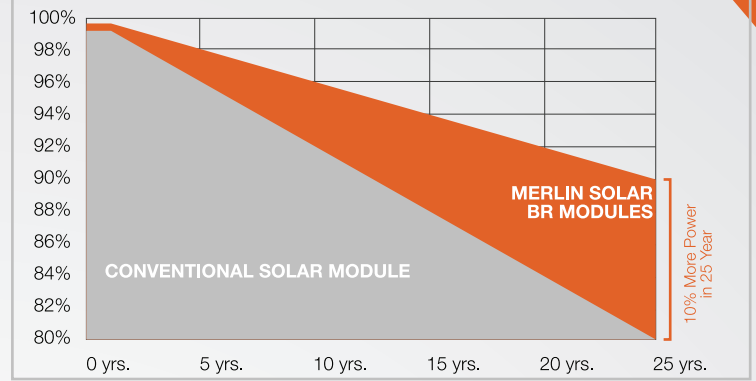
- UL listed / IEC Approved / CEC listed
- High performance levels
- High Strength/Hurricane Resistant
- Stable reinforcement to the solar cell
- Reliability of c-Si solar cells
- Enhanced production in low / diffused light
- Frameless, low-profile design

### BENEFITS OF SOLAR INTEGRATED ROOFING

- Fast & easy snap-on application
- Low installation cost
- Maximized tax credit benefit
- Enhanced energy output
- Superior aesthetics
- High durability & reliability



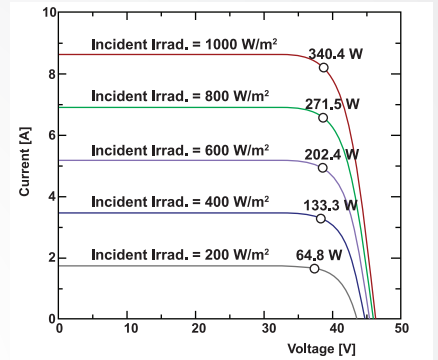
## ANNUAL DEGRADATION RATE



## TECHNICAL DATA

| Electrical Characteristics (STC) <sup>1</sup><br>MERLIN® PV Module Specs | Unit | 320  | 325   | 330   | 335   | 340   | 345   | 350   |
|--|------|--|-------|-------|-------|-------|-------|-------|
| Cell Type  |      | Mono                                       |       |       |       |       |       |       |
| Number in series   |      | 72   |       |       |       |       |       |       |
| Rated Power (Pmax)   | W    | 320  | 325   | 330   | 335   | 340   | 345   | 350   |
| Voltage at Pmax (Vmp)  | V    | 36.40                                      | 36.90 | 37.46 | 37.97 | 38.42 | 38.94 | 39.44 |
| Current at Pmax (Imp)  | A    | 8.80                                       | 8.82  | 8.83  | 8.84  | 8.85  | 8.87  | 8.88  |
| Open-circuit Voltage (Voc)   | V    | 44.30                                      | 44.85 | 45.38 | 45.89 | 46.13 | 46.30 | 46.50 |
| Short-circuit Current (Isc)  | A    | 9.09                                       | 9.11  | 9.13  | 9.15  | 9.17  | 9.27  | 9.34  |
| Active Area Efficiency   | %    | 18.19                                      | 18.48 | 18.76 | 19.05 | 19.33 | 19.61 | 19.90 |
| Temperature Coefficient of Isc   | %/°C | 0.05                                       |       |       |       |       |       |       |
| Temperature Coefficient of Voc   | %/°C | -0.33                                      |       |       |       |       |       |       |
| Temperature Coefficient of Pmax  | %/°C | -0.42                                      |       |       |       |       |       |       |
| Maximum series fuse rating   | A    | 15   |       |       |       |       |       |       |
| Maximum system voltage   | VDC  | 1000                                       |       |       |       |       |       |       |
| Nominal Operating Cell Temperature (NOCT) <sup>2</sup>                   | °C   | 46 +/-2                                    |       |       |       |       |       |       |
| Operating temperature  | °C   | -40 to +85                                 |       |       |       |       |       |       |
| Termination  |      | Jbox with PV cable and polarize connectors |       |       |       |       |       |       |

## IV Curves PV Module BR72 - 340



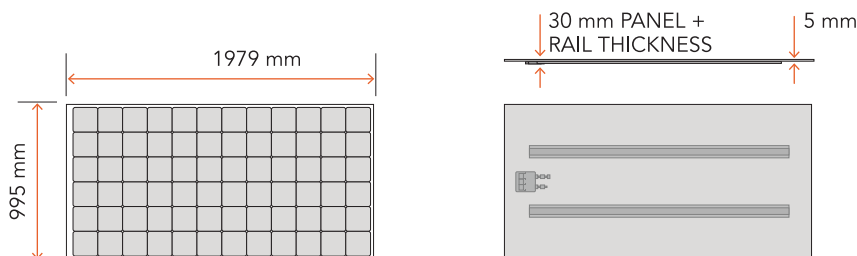
## Physical Characteristics

| Units     | mm / kg  | in / lb                           |
|-----------|----------|-----------------------------------|
| Length    | 1979     | 77 <sup>15</sup> / <sub>16</sub>  |
| Width     | 995      | 39 <sup>3</sup> / <sub>16</sub>   |
| Thickness | 30       | 1 <sup>3</sup> / <sub>16</sub>    |
| Weight    | 23.36 kg | 51 <sup>1</sup> / <sub>2</sub> lb |

- STC standard test conditions: 1000W/m<sup>2</sup> intensity, Air Mass 1.5, 25°C cell temperature.
- The power tolerance is -0% / +3% W, at STC. The electrical characteristics are within ±10% unless otherwise specified.

## QUALIFICATIONS

- UL Standard 1703
- IEC 61215/61730
- Warranted up to 25 years
- Materials and workmanship 15 years
- Power output 25 years
- 90% of nominal rated power after 25 years.
- Degradation in power is linear over 25 years.



Read more



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