

MONO CRYSTALLINE MODULE

285 / 290 / 295 / 300 / 305 / 310 Watts

Series 60M: 285 to 310 Wp

Overview

A fully certified, premium quality and high efficiency module made with A Grade materials manufactured in France. Guaranteed positive tolerance of up to 5W.

Quality

- ISO 9001 Certification
- Holder of the mark "Certisolis"

Components

- Certified suppliers
- Strict criteria for the selection of cells (Europe and Asia)
- MC4 Type connectors

Tech

- IEC 61215 and 61730 parts I and II
- Load resistance -5400 pa
- Hail impact resistance class 4
- Max voltage 1000V/1500V

Warranty

- Product: 15 years
- 1 Year: Mono (97%) / Poly (98%)
- 10 Years: 90% / 25 years: 80% (linear)
- Product liability insurance provided by Allianz

Environment

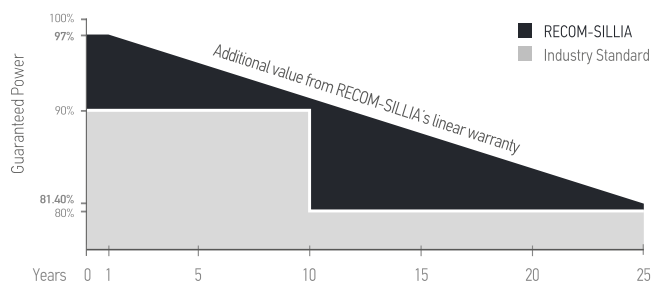
- Regulated carbon footprint
- Member of PV Cycle
- OHSAS 18001 and ISO14001 Std.

Product

- Class 285-310 Wp -0/+4.99 Wp
- Poly or Mono cells
- 60 or 72 cells per module

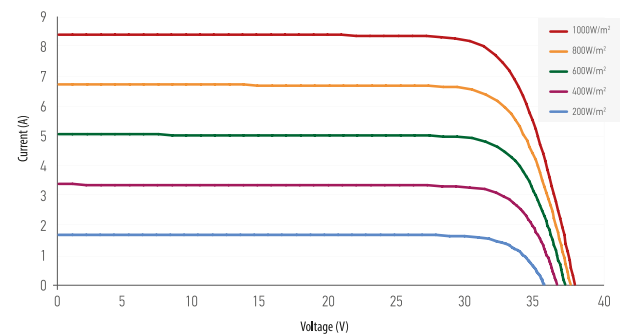


Linear Performance Warranty



First Year Output $\geq 97\%$ 2-24 Year Decline $\leq 0.65\%$ 25 Year Output $\geq 81.40\%$

I-V Curve



The module relative power loss at low light irradiance of 200W/m² is less than 3%

MONO CRYSTALLINE MODULE

60MXXX (xxx=285-310)

Electrical Characteristics

| Electrical Performance STC ⁽¹⁾ | | 60M285 | 60M290 | 60M295 | 60M300 | 60M305 | 60M310 |
|---|---|--------|--------|--------|--------|--------|--------|
| PMPP | [W] | 285 | 290 | 295 | 300 | 305 | 310 |
| Module Efficiency | [%] | 17.34 | 17.65 | 17.95 | 18.25 | 18.56 | 18.86 |
| VMPP | [V] | 31.52 | 31.61 | 31.86 | 32.04 | 32.21 | 32.35 |
| IMPP | [A] | 9.04 | 9.17 | 9.26 | 9.37 | 9.48 | 9.56 |
| VOC | [V] | 38.67 | 38.90 | 39.05 | 39.23 | 39.42 | 39.60 |
| ISC | [A] | 9.52 | 9.61 | 9.69 | 9.78 | 9.86 | 9.95 |
| Electrical Performance NOCT ⁽²⁾ | | 60M285 | 60M290 | 60M295 | 60M300 | 60M305 | 60M310 |
| PMPP | [W] | 208.00 | 211.00 | 215.00 | 219.00 | 223.00 | 226.00 |
| VMPP | [V] | 28.78 | 28.86 | 29.09 | 29.25 | 29.41 | 29.52 |
| IMPP | [A] | 7.23 | 7.33 | 7.41 | 7.50 | 7.58 | 7.65 |
| VOC | [V] | 35.7 | 35.91 | 36.04 | 36.21 | 36.39 | 36.56 |
| ISC | [A] | 7.68 | 7.75 | 7.81 | 7.88 | 7.95 | 8.02 |
| Electrical Performance Low Irradiation ⁽³⁾ | | 60M285 | 60M290 | 60M295 | 60M300 | 60M305 | 60M310 |
| PMPP | [W] | 54.60 | 55.40 | 56.60 | 57.50 | 58.50 | 59.30 |
| Maximum Series Fuse | [A] | 15 | 15 | 15 | 15 | 15 | 15 |
| Maximum System Voltage | 1.000 VDC (IEC) - 1.000 VDC (UL) / 1.500 VDC (upon request) | | | | | | |

Tolerance measurements may vary to +/-2.5% Classification type: 0/+5Wc or customized

(1) Values corrected according to standardized test conditions STC: solar irradiance of 1000 W/m²; AM 1.5; cell temperature 25°C.

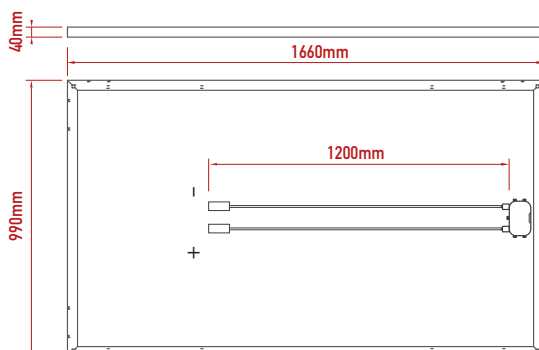
(2) Values corrected according to test conditions NOCT: solar irradiance of 800 W/m²; AM 1.5; NOCT cell temperature.

(3) Corrected values according to low Irradiation test conditions: solar irradiance of 200 W/m²; AM 1.5; cell temperature 25°C.

Mechanical Data

| | |
|--------------|---------------------------|
| Dimensions | 1660mm x 990mm x 40mm |
| Weight | 18.0 Kg |
| Frame | Anodized aluminum |
| Front Glass | Tempered glass (EN12150) |
| Backsheet | PET synthetic film |
| Junction Box | IP67, 3 bypass diodes |
| Cells | Monocrystalline silicon 6 |
| Connectors | GZX / MC4 |

Dimensions



Temperature Characteristics

| | |
|---|----------------|
| Pmax Temperature Coefficient | -0.40% / °C |
| Voc Temperature Coefficient | -0.30% / °C |
| Isc Temperature Coefficient | +0.04% / °C |
| Operating Temperature | -40°C / + 85°C |
| Nominal Operating Cell Temperature (NOCT) | 47°C |

Packing Configuration

| | |
|-------------------|-----|
| Pieces per Pallet | 22 |
| Pallets per Truck | 30 |
| Pieces per Truck | 660 |

Additional options

- Silver white module or full black
- MC4 compatible (standard) or Multicontact MC4
- Anti-reflective glass (3.2mm thick) or near airport use (4mm thick)

**Release 2019-01, v1.2.

RECOM-SILLIA assumes no liability or responsibility for any typographical error, layout error, misinformation, any other error, omission, contained herein.

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, RECOM-SILLIA reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein. Please read the safety and installation instructions before using the modules.