

MONO CRYSTALLINE MODULE

280 / 285 / 290 / 295 / 300 / 305 / 310 Watts

Black Panther

Overview

A fully certified, premium quality and high efficiency module made with Grade A materials. Guaranteed positive tolerance of up to 5 Watts, providing a higher output compared to our leading competitors.

Key Benefits



Certified by independent Engineering Bodies



Product liability Insurance



Manufactured in EU



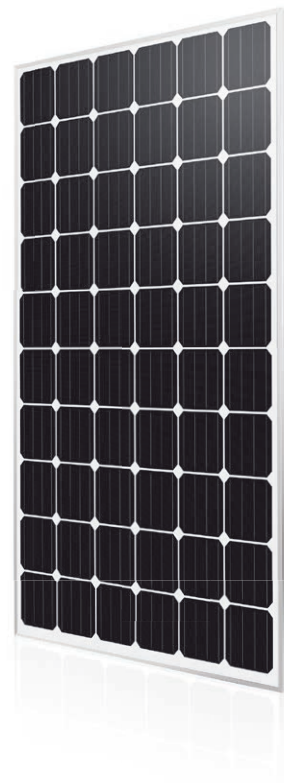
12 years limited product warranty



Anti-PID Technology



Low Carbon Footprint



Guaranteed mechanical resistance to severe weather conditions



Guaranteed Positive Tolerance up to <5W



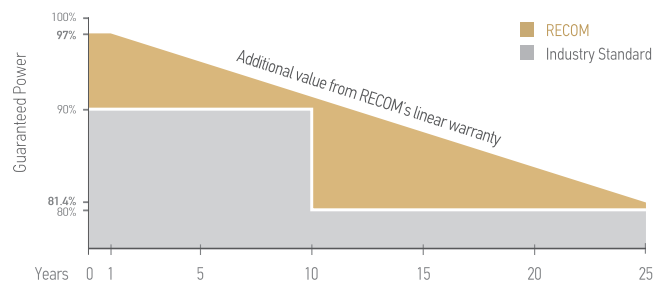
100 % electro-luminescence tested

Tests, Certifications and Warranties

Standard tests	UL1703, IEC 61215, IEC 61730
Factory Quality tests	ISO 9001: 2008, ISO 14001: 2004, ISO17025: 2005
Certifications	Fire Rating Type 1, conformity to CE, PV CYCLE
Insurance	Product liability insurance provided by Allianz
Wind and snow loads testing	Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)
Positive tolerance	Guaranteed positive tolerance of up to 5W
Junction Box	IP67 Rated, 3 diodes

- Warranties
- 12-year limited product warranty
 - 15-year manufacturer warranty on 88.55% of the nominal performance
 - 25-year transferable linear power output warranty

Linear Performance Warranty



First Year Output $\geq 97\%$ 2-24 year Decline $\leq 0.65\%$ 25 Year Output $\geq 81.4\%$

MONO CRYSTALLINE MODULE

RCM-xxx-6MB (xxx=280-310)

Electrical Characteristics

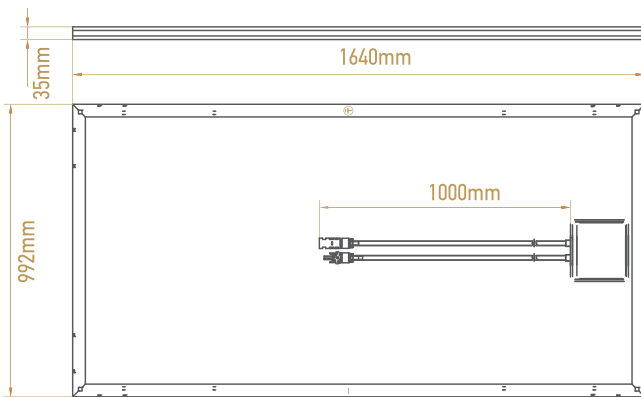
Rated Power	280W	285W	290W	295W	300W	305W	310W
Power Tolerance	0 ~ 5W	0 ~ 5W	0 ~ 5W	0 ~ 5W	0 ~ 5W	0 ~ 5W	0 ~ 5W
Maximum Power Voltage (Vmp)	32.50V	32.60V	32.70V	32.76V	32.83V	32.90V	32.97V
Maximum Power Current (Imp)	8.67A	8.74A	8.86A	9.01A	9.13A	9.27A	9.40A
Open Circuit Voltage (Voc)	39.20V	39.80V	39.90V	39.95V	40.00V	40.10V	40.30V
Short Circuit Current (Isc)	8.99A	9.60A	9.75A	9.82A	9.97A	10.06A	10.28A
Module Efficiency	17.3%	17.5%	17.7%	18.0%	18.3%	18.6%	19.0%
Maximum Series fuse	15A	15A	15A	15A	15A	15A	15A
Maximum System Voltage	1000V DC(IEC) / 1000V DC(UL)						

Tested at Standard Test Conditions. Measurement tolerances: $\pm 3\%$

Mechanical Data

Dimensions	1640mm x 992mm x 35mm
Frame	Anodized aluminum
Weight	19 kgs
Front Glass	3.2 mm Tempered glass
Output Cables	TUV (2Pfg1169:2007), UL 4703, UL44 4.0 mm ² (0.006 in ²), symmetrical lengths (-) 1000mm and (+) 1000 mm, MC4 type connectors

Dimensions



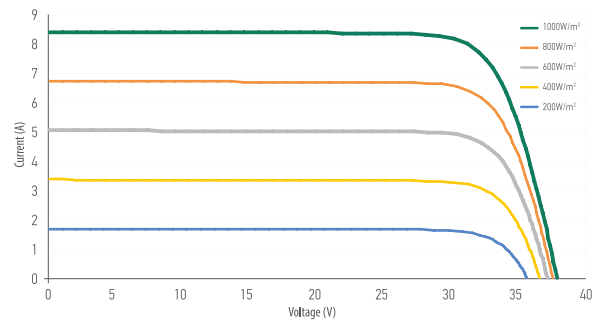
**Release 2017-05, v4.1.

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I-V Curve

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



Temperature Characteristics

Pmax Temperature Coefficient	-0.39% \pm 0.02% / °C
Voc Temperature Coefficient	-0.31 \pm 0.01% / °C
Isc Temperature Coefficient	+0.048 % / °C
Operating Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature (NOCT)	45 \pm 2 °C

Packing Configuration

Container	40' HC
Pieces per Pallet	29 or 30
Pallets per Container	28
Pieces per Container	812 or 840

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 Solar 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.