

## MONO CRYSTALLINE HALF-CUT CELL MODULE

395 / 400 / 405 / 410 / 415 Watts

# Black Panther

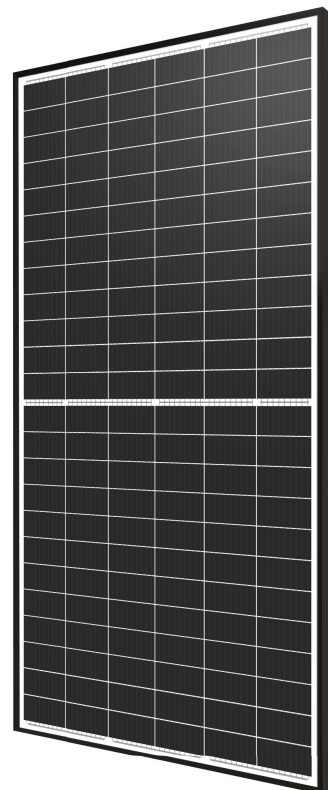


## Overview

Ground breaking technology; higher power output of up to 10W, improved system performance - the ideal solution for end users who want a fast turnaround on their investments. A fully certified premium quality and high efficiency module made with A Grade materials.

## Key Benefits

	Certified by Independent Engineering Bodies		Ultra High Power Output
	Product Liability Insurance		Reduce Resistive Losses
	Better Performance in Reduced Irradiance Conditions		15 Years Limited Product Warranty



Guaranteed mechanical resistance to severe weather conditions



Positive Tolerance

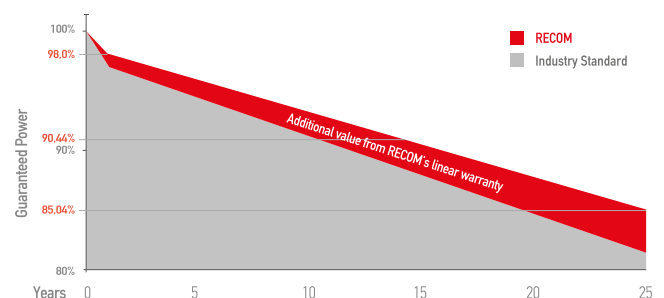


100 % electro-luminescence tested

## Tests, Certifications and Warranties

Standard Tests	IEC 61215, IEC 61730
Factory Quality Tests	ISO 9001: 2015, ISO 14001: 2015
Certifications	Conformity to CE, PV CYCLE Fire safety Class C according to UL790
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)
Power Tolerance	Guaranteed +0%/+5% (STC condition)
Warranties	<ul style="list-style-type: none"> <li>15-year limited product warranty</li> <li>15-year manufacturer warranty on 90.44% of the nominal performance</li> <li>25-year transferable linear power output warranty</li> </ul>

## Linear Performance Warranty



First Year Output  $\geq 98\%$

2-25 Year Decline  $\leq 0.54\%$

25 Year Output  $\geq 85.04\%$

MONO CRYSTALLINE HALF-CUT CELL MODULE

RCM-xxx-6MF(xxx=395-415)

Electrical Characteristics

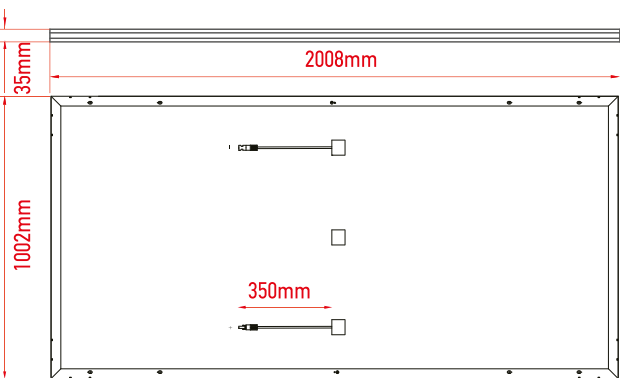
POWER CLASS <sup>(1)</sup>			395		400		405		410		415	
Testing Condition			STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power	Pmax	[Wp]	395	299	400	303	405	307	410	310.8	415	314.97
Maximum Power Voltage	Vmp	[V]	41.44	39.34	41.73	39.61	42.07	39.94	42.41	40.26	42.75	40.59
Maximum Power Current	Imp	[A]	9.54	7.59	9.59	7.63	9.63	7.66	9.67	7.69	9.71	7.73
Open Circuit Voltage	Voc	[V]	49.54	48.24	49.89	48.58	50.3	48.98	50.71	49.38	51.11	49.77
Short Circuit Current	Isc	[A]	10.22	8.08	10.27	8.12	10.32	8.16	10.36	8.19	10.41	8.23
Module Efficiency	Eff	[%]	19.64		19.89		20.13		20.38		20.63	
Maximum Series Fuse	IR	[A]	15/20									
Maximum System Voltage	Vsys	[V]	1000 V DC / 1500 V DC									

(1) Measurement Tolerances: P<sub>max</sub> (± 3%), I<sub>sc</sub> & V<sub>oc</sub> (± 5%) - Power Classification 0/+5W  
(2) STC (Standard Testing Condition): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM 1.5  
(3) NMOT (Nominal Operating Module Temperature): Irradiance 800W/m<sup>2</sup>, NMOT, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Mechanical Data

Dimensions	2008 mm x 1002 mm x 35 mm
Weight	22.4 Kg
Cell Type	Mono Perc - 158.75mm x 79.375mm (2 x 72 Pcs) - G1
Front Glass	3.2mm Tempered and low iron glass + ARC
Rear Side	Anti-aging film
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 Bypass diodes
Connector	MC4 compatible or EV02 compatible
Output cable	4mm <sup>2</sup> - Length = 350mm or customized

Dimensions



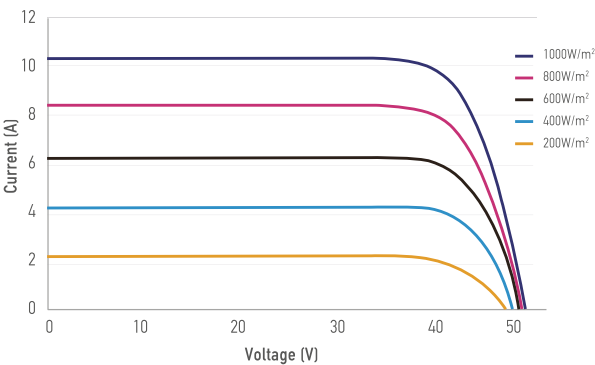
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I-V Curve

The module relative power loss at low light irradiance of 200W/m<sup>2</sup> is less than 3%.



Temperature Characteristics

P <sub>max</sub> Temperature Coefficient	-0.387% / °C
V <sub>oc</sub> Temperature Coefficient	-0.282% / °C
I <sub>sc</sub> Temperature Coefficient	+0.041% / °C
Operating Temperature	-40~+85 °C
Nominal Operating Module Temperature (NMOT)	42 ± 2 °C

Packing Configuration

Container	40'HC
Pieces per Pallet	31
Pallets per Container	22
Pieces per Container	(31+31+6)x11=748