

MONO CRYSTALLINE HALF-CUT BIFACIAL MODULE

540 / 545 / 550 / 555 Watts

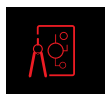
Panther Series



Overview

Ground breaking technology; higher power output, 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



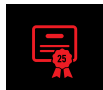
Certified by Independent Engineering Bodies



Product Liability Insurance



Ultra High Power Output



25 Years Limited Product Warranty



Low Resistive Losses



Higher Light Conversion



Guaranteed mechanical resistance to severe weather conditions



Positive Tolerance

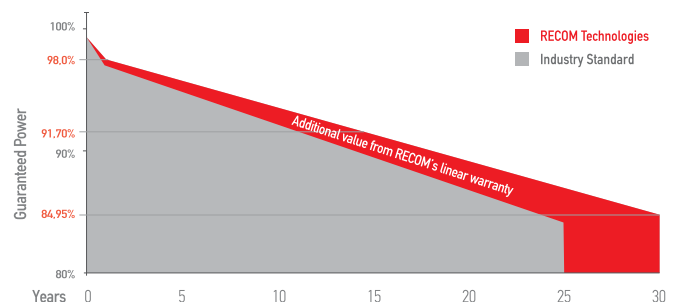


100 % electro-luminescence tested

Tests, Certifications and Warranties

Standard Tests	IEC 61215, IEC 61730 & UL 61730
Factory Quality Tests	ISO 9001: 2015, ISO 14001: 2015
Certifications	Conformity to CE, PV CYCLE Fire safety Class C according to UL790
Wind and Snow Loads Testing	Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)
Power Tolerance	Guaranteed +0/+5W (STC condition)
Warranties	• 25-year limited product warranty • 15-year manufacturer warranty on 91.70% of the nominal performance • 30-year transferable linear power output warranty

Linear Performance Warranty



First Year Output $\geq 98\%$

2-30 Year Decline $\leq 0.45\%$

30 Year Output $\geq 84.95\%$

Panther

MONO CRYSTALLINE HALF-CUT BIFACIAL MODULE

RCM-xxx-7BMF (xxx=540-555)

Electrical Characteristics

POWER CLASS ⁽¹⁾			540		545		550		555	
Testing Condition			STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power	Pmax	[Wp]	540	403,1	545	406,9	550	410,9	555	414,4
Maximum Power Voltage	Vmp	[V]	41,69	38,86	41,94	39,09	42,19	39,33	42,42	39,54
Maximum Power Current	Imp	[A]	12,96	10,38	13,00	10,41	13,05	10,45	13,09	10,48
Open Circuit Voltage	Voc	[V]	49,78	46,56	50,00	46,76	50,25	46,99	50,50	47,23
Short Circuit Current	Isc	[A]	13,59	10,97	13,64	11,01	13,69	11,05	13,73	11,08
Module Efficiency	Eff	[%]	20,9		21,1		21,3		21,5	
Maximum Series Fuse	IR	[A]	25							
Maximum System Voltage	Vsys	[V]	1500 V DC							

(1) Measurement Tolerances: P_{max} (± 3%), I_{sc} & V_{oc} (± 3%) - Power Classification 0/+5W

(2) STC (Standard Testing Condition): Irradiance 1000W/m², Cell Temperature 25°C, AM 1.5

(3) NMOT (Nominal Operating Module Temperature): Irradiance 800W/m², NMOT, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Bi Facial Output (4)

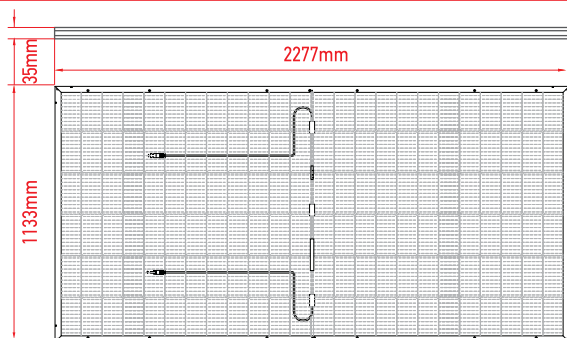
POWER CLASS			540		545		550		555	
			P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]
Power with Backside Gain	+5	[%]	567,0	22,0%	572,3	22,2%	577,5	22,4%	582,8	22,6%
	+10	[%]	594,0	23,0%	599,5	23,2%	605,0	23,5%	610,5	23,7%
	+15	[%]	621,0	24,1%	626,8	24,3%	632,5	24,5%	638,3	24,7%
	+20	[%]	648,0	25,1%	654,0	25,4%	660,0	25,6%	666,0	25,8%
	+25	[%]	675,0	26,2%	681,3	26,4%	687,5	26,6%	693,8	26,9%
	+30	[%]	702,0	27,2%	708,5	27,5%	715,0	27,7%	721,5	28,0%

(4) Bifaciality Factor > 70% - Back-side power gain depends upon the specific project albedo - Efficiency is according to the surface of the module

Mechanical Data

Dimensions	2277mm x 1133mm x 35mm (89.65 x 44.60 x 1.4 in)
Weight	29.0 Kg (63.93 lb)
Cell Type	Mono Perc – 182mm x 91mm (7.17 x 3.59 in) (2x72 Pcs) – M10
Front Glass	3.2mm (0.13 in) Tempered and low iron glass + ARC
Rear Side	Anti-aging film (Clear)
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 Bypass Diodes
Connector	Original MC4 - EV02
Output cable	4mm ² (0.16 in ²) - Length: 300mm (11.81 in) or can be customized

Dimensions

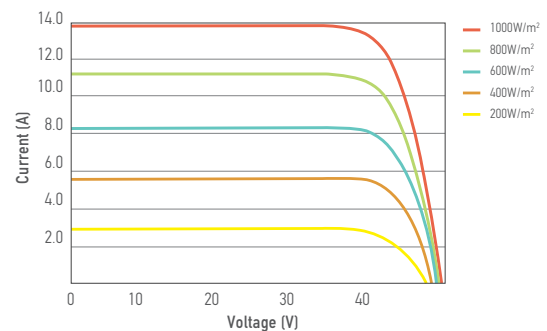


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I-V Curve

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



Temperature Characteristics

P _{max} Temperature Coefficient	-0.35% / °C
V _{oc} Temperature Coefficient	-0.22% / °C
I _{sc} Temperature Coefficient	+0.05% / °C
Operating Temperature (IEC)	-40~+85 °C
Operating Temperature (UL)	-40~+90 °C
Nominal Operating Module Temperature (NMOT)	42 ± 2 °C

Packing Configuration

Container	40' HC
Pieces per Pallet	31
Pallets per Container	20
Pieces per Container	(31+31) x 10=620

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