

MONO CRYSTALLINE DOUBLE-GLASS HALF CUT BIFACIAL MODULE

530 / 535 / 540 / 545 / 550 / 555 Watts

Panther Eco Value 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.



Guaranteed mechanical resistance to severe weather conditions

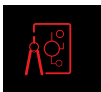


Positive Tolerance



100 % electro-luminescence tested

Key Benefits



Certified by Independent Engineering Bodies



Product Liability Insurance



Ultra High Power Output



25 Years Limited Product Warranty



Low Resistive Losses

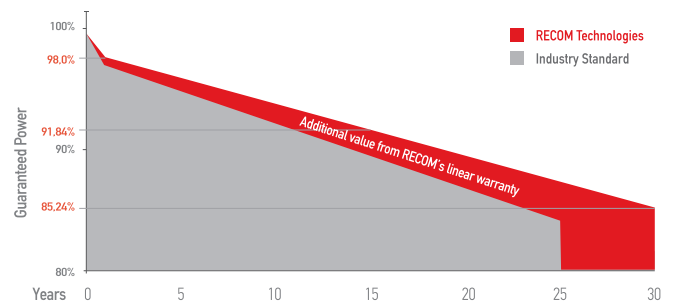


Higher Light Conversion

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	Third party liability insurance provided by Liberty Mutual
Wind and Snow Loads Testing	Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)
Withstanding Hail	Maximum Diameter of 25 mm with impact speed of 23 m/s
Power Tolerance	Guaranteed +0/+5W (STC condition)
Warranties	<ul style="list-style-type: none"> 25-year limited product warranty 15-year manufacturer warranty on 91.84% of the nominal performance 30-year transferable linear power output warranty

Linear Performance Warranty



First Year Output $\geq 98.0\%$ 2-30 Year Decline $\leq 0.44\%$ 30 Year Output $\geq 85.24\%$

Panther

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RCM-xxx-7DBMF (xxx=530-555)

Electrical Characteristics

POWER CLASS ⁽¹⁾			530		535		540		545		550		555	
Testing Condition			STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power	P _{max}	[Wp]	530	396	535	400	540	404	545	408	550	412	555	416
Maximum Power Voltage	V _{mp}	[V]	41,32	37,50	41,46	37,64	41,65	37,77	41,81	37,90	41,97	38,01	42,15	38,11
Maximum Power Current	I _{mp}	[A]	12,83	10,58	12,90	10,65	12,97	10,70	13,04	10,76	13,10	10,85	13,17	10,92
Open Circuit Voltage	V _{oc}	[V]	49,31	45,29	49,44	45,43	49,61	45,56	49,76	45,69	49,91	45,81	50,03	46,03
Short Circuit Current	I _{sc}	[A]	13,73	11,45	13,78	11,52	13,85	11,59	13,92	11,66	14,02	11,73	14,07	11,8
Module Efficiency	Eff	[%]	20,52		20,71		20,90		21,10		21,29		21,48	
Maximum Series Fuse	I _R	[A]	25											
Maximum System Voltage	V _{sys}	[V]	1500 V DC (IEC)											

(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			530		535		540		545		550		555	
			P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]
Power with Backside Gain	+5	[%]	556,5	21,5%	561,8	21,7%	567,0	21,9%	572,3	22,2%	577,5	22,4%	582,8	22,6%
	+10	[%]	583,0	22,6%	588,5	22,8%	594,0	23,0%	599,5	23,2%	605,0	23,4%	610,5	23,6%
	+15	[%]	609,5	23,6%	615,3	23,8%	621,0	24,0%	626,8	24,3%	632,5	24,5%	638,3	24,7%
	+20	[%]	636,0	24,6%	642,0	24,9%	648,0	25,1%	654,0	25,3%	660,0	25,5%	666,0	25,8%
	+25	[%]	662,5	25,6%	668,8	25,9%	675,0	26,1%	681,3	26,4%	687,5	26,6%	693,8	26,9%
	+30	[%]	689,0	26,7%	695,5	26,9%	702,0	27,2%	708,5	27,4%	715,0	27,7%	721,5	27,9%

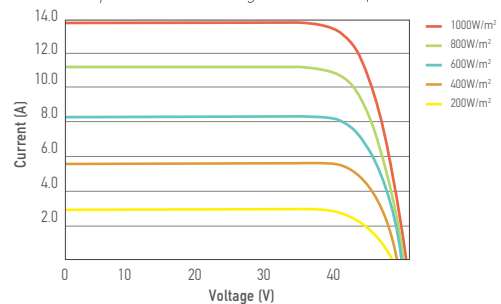
(4) Bifaciality Factor > 70% - Back-side power gain depends upon the specific project albedo - Efficiency is according to the surface of the module

Mechanical Data

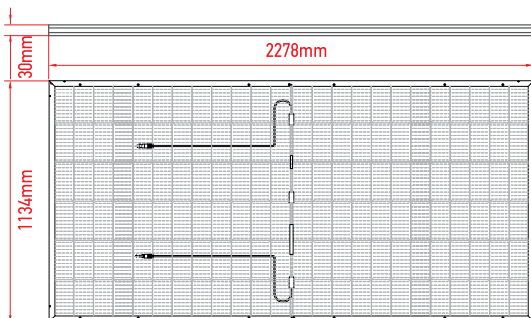
Dimensions	2278mm x 1134mm x 30mm
Weight	31,2 Kg
Cell Type	Mono Perc – 182mm x 91mm (2x72 Pcs) – M10
Front Glass	2.0 mm Tempered and low iron glass + ARC
Rear Side	2.0 mm Tempered and low iron glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 Bypass Diodes
Connector	MC4 compatible
Output cable	4mm ² - Length = 1300mm or customized

I-V Curve

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



Dimensions



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Temperature Characteristics

P _{max} Temperature Coefficient	-0.350% / °C
V _{oc} Temperature Coefficient	-0.275% / °C
I _{sc} Temperature Coefficient	+0.045% / °C
Operating Temperature	-40~+85 °C
Nominal Operating Module Temperature (NMOT)	42 ± 2 °C

Packing Configuration

Container	40' HC
Pieces per Pallet	36
Pallets per Container	20
Pieces per Container	(36+36) x 10 = 720 pcs

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