

MONO CRYSTALLINE HALF-CUT BIFACIAL MODULE

580 / 585 / 590 / 595 / 600 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

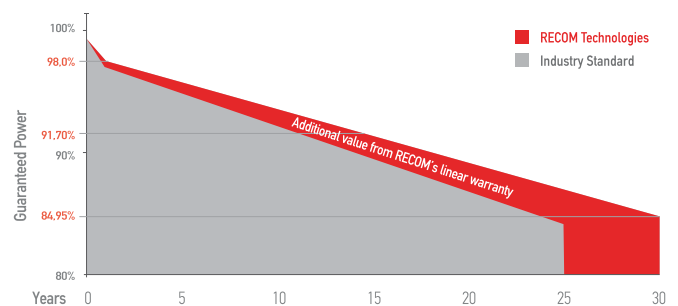


100 % electro-luminescence tested

Tests, Certifications and Warranties

Standard Tests	IEC 61215, IEC 61730
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)
Power Tolerance	Guaranteed +0/+5W (STC condition)
Warranties	<ul style="list-style-type: none"> 25-year limited product warranty 15-year manufacturer warranty on 91.70% of the nominal performance 30-year transferable linear power output warranty

Linear Performance Warranty



First Year Output	≥ 98%	2-30 Year Decline	≤ 0.45%	30 Year Output	≥ 84.95%
-------------------	-------	-------------------	---------	----------------	----------

Panther

MONO CRYSTALLINE HALF-CUT BIFACIAL MODULE

RCM-xxx-7BMN (xxx=580-600)

Electrical Characteristics

POWER CLASS ⁽¹⁾			580		585		590		595		600	
Testing Condition			STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power	Pmax	[Wp]	580	428	585	431	590	435	595	438	600	442
Maximum Power Voltage	Vmp	[V]	44,40	41,40	44,60	41,60	44,80	41,80	45,00	42,00	45,20	42,20
Maximum Power Current	Imp	[A]	13,07	10,32	13,12	10,36	13,17	10,41	13,22	10,45	13,27	10,50
Open Circuit Voltage	Voc	[V]	53,30	49,80	53,50	50,00	53,70	50,20	53,90	50,40	54,10	50,60
Short Circuit Current	Isc	[A]	13,81	11,13	13,87	11,18	13,94	11,23	14,01	11,28	14,08	11,33
Module Efficiency	Eff	[%]	20,94		21,12		21,30		21,48		21,66	
Maximum Series Fuse	IR	[A]	25									
Maximum System Voltage	VSys	[V]	1500 V (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)

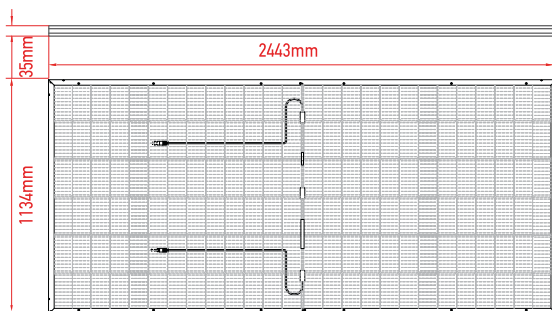
POWER CLASS			580		585		590		595		600	
			P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]
Power with Backside Gain	+5	[%]	609,0	22,0%	614,3	22,2%	619,5	22,4%	624,8	22,6%	630,0	22,7%
	+10	[%]	638,0	23,0%	643,5	23,2%	649,0	23,4%	654,5	23,6%	660,0	23,8%
	+15	[%]	667,0	24,1%	672,8	24,3%	678,5	24,5%	684,3	24,7%	690,0	24,9%
	+20	[%]	696,0	25,1%	702,0	25,3%	708,0	25,6%	714,0	25,8%	720,0	26,0%
	+25	[%]	725,0	26,2%	731,3	26,4%	737,5	26,6%	743,8	26,8%	750,0	27,1%
	+30	[%]	754,0	27,2%	760,5	27,5%	767,0	27,7%	773,5	27,9%	780,0	28,2%

(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	2443mm x 1134mm x 35mm
Weight	27,0 Kg
Cell Type	Mono Perc – 182mm x 91mm (2x78 Pcs) – M10
Front Glass	3.2mm Tempered and low iron glass + ARC
Rear Side	Anti-aging film (Clear)
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 Bypass Diodes
Connector	MC4 compatible
Output cable	4 mm² Length= 1500 mm or can be customized

Dimensions

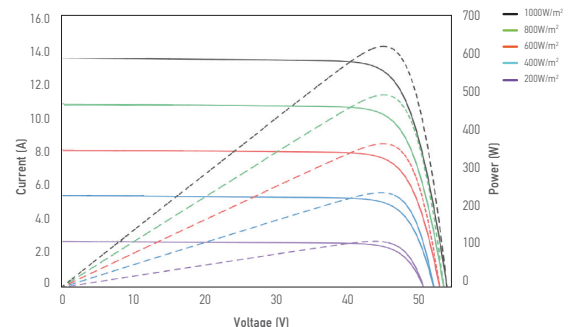


RECOM assumes no liability or responsibility for any typographical error, layout error, misinformation, any other error, omission, contained herein.

www.recom-tech.com

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	-0.36% / °C
V _{oc} Temperature Coefficient	-0.28% / °C
I _{sc} Temperature Coefficient	+0.05% / °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	18
Pieces per Container	(31+31) x 9 = 558 pcs

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 Technologies 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.