

MONO CRYSTALLINE - SHINGLED CELL TECHNOLOGY

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

Puma Series



Superior Performance and Reliability

Shingled technology eliminates traditional ribbon connection with shingles connected in series. By removing the soldered ribbons, the active area of the module is improved and thermal stresses are reduced – resulting in exceptional efficiency and reliability over standard interconnections.

Key Benefits



Higher yield per surface area



Higher yield in hot climate



Low LCOE



Low Pmax Temperature Coefficient



25 Years Limited Product Warranty



Low Resistive Losses





Outstanding performance under extreme heat as well as low intensity solar radiation

Pmax

Significantly low Pmax thermal coefficient



Positive Tolerance

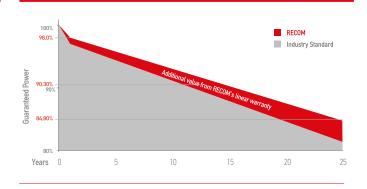


100 % electroluminescence tested

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
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%/+5% (STC condition)
Warranties	 25-year limited product warranty 15-year manufacturer warranty on 90.30% of the nominal performance 25-year transferable linear power output warranty

Linear Performance Warranty



First Year Output

≥ 98.0%

2-25 Year Decline

≤ 0.55%

25 Year Output

≥ 84.80%

Electrical Characteristics

POWER CLASS (1)		530		535		540		545		550		555		
Testing Condition			STC	NMOT										
Maximum Power	Pmax	[Wp]	530	399	535	403	540	407	545	410	550	414	555	418
Maximum Power Voltage	Vmp	[V]	38,2	36,4	38,3	36,5	38,3	36,6	38,4	36,6	38,5	36,7	38,6	36.8
Maximum Power Current	lmp	[A]	13,88	10,96	13,98	11,04	14,08	11,12	14,18	11,20	14,28	11,28	14,38	11,36
Open Circuit Voltage	Voc	[V]	46,0	43,9	46,1	43,9	46,2	44,0	46,3	44,1	46,4	44,2	46,5	44,3
Short Circuit Current	Isc	[A]	14.77	11,92	14,87	12,00	14,98	12,09	15,09	12,17	15,19	12,26	15,30	12,34
Module Efficiency	Eff	[%]	20,6		20,8		21,0		21,2		21,4		21,6	
Maximum Series Fuse	lR	[A]	25											

Maximum System Voltage VSYS [V]

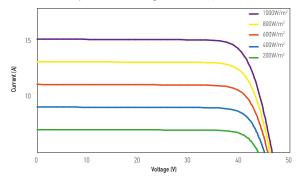
1.500 VDC (IEC)

Mechanical Data

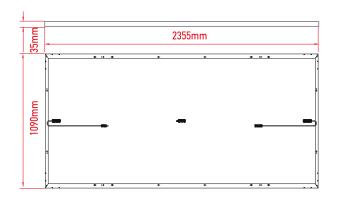
Dimensions	2355mm x 1090m x 35mm
Weight	28 Kg
Cell Type	PERC Mono - 210 x 35 mm - 340 pcs - G12
Front Glass	3.2mm Tempered and low iron glass + ARC
Backsheet	Anti-aging film
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 bypass diodes
Connector	MC4 compatible
Cable	4.0mm ² - 700mm (V), +250mm/-150mm (H) or customized

I-V Curve

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



Dimensions



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

Temperature Characteristics

Pmax Temperature Coefficient	-0.34% / °C
Voc Temperature Coefficient	-0.27% / °C
Isc Temperature Coefficient	+0.04% / °C
Operating Temperature	-40~+85°C
(NMOT) Nominal Module Operating Temperature	42.3 ± 2 °C

Packing Configuration

Container	40°HC
Pieces per Pallet	31
Pallets per Container	20
Pieces per Container	620

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⁽¹⁾ Measurement Tolerances: Pmax (\pm 3%), Isc & Voc (\pm 5%) - Power Classification 0/+5W

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

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