

MONO CRYSTALLINE - SHINGLED CELL TECHNOLOGY

385 / 390 / 395 / 400 / 405 / 410 / 415 Watts

Puma Series

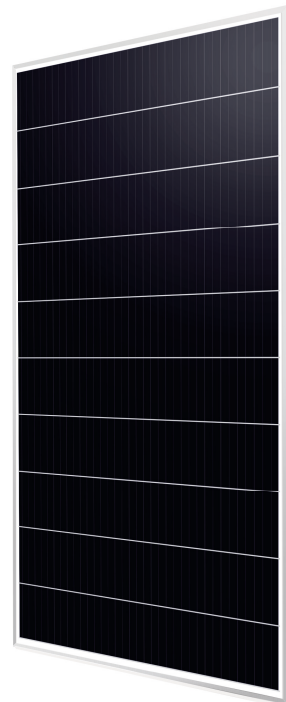


Superior Performance and Reliability

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		Low Pmax Temperature Coefficient
	Higher yield in hot climate		25 Years Limited Product Warranty
	Low LCOE		Low Resistive Losses



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



Significantly low Pmax thermal coefficient



Positive Tolerance

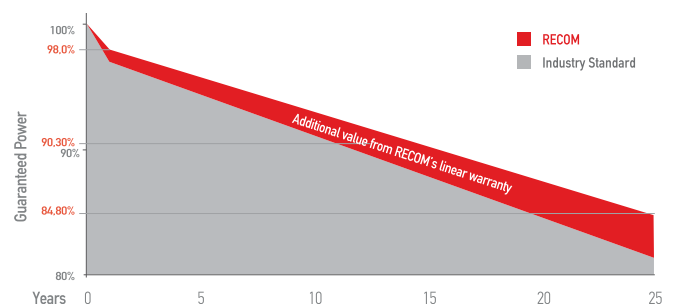


100 % electro-luminescence tested

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
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	<ul style="list-style-type: none"> 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	$\geq 98.0\%$	2-25 Year Decline	$\leq 0.55\%$	25 Year Output	$\geq 84.80\%$
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RCM-xxx-SMB (xxx=385-415)

Electrical Characteristics

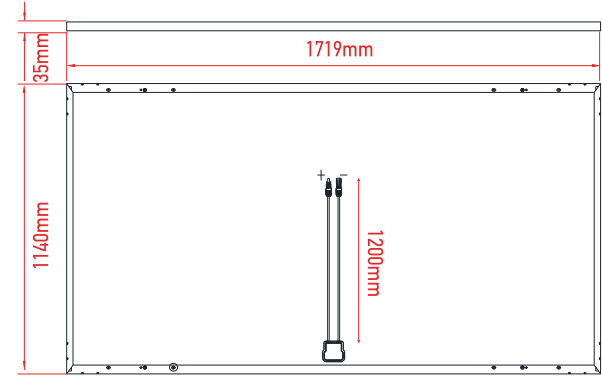
POWER CLASS ⁽¹⁾			380		385		390		395		400		405		410		415	
Testing Condition			STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power	Pmax	[Wp]	380	286	385	290	390	294	395	297	400	301	405	305	410	309	415	312
Maximum Power Voltage	Vmp	[V]	38.3	36.5	38.4	36.6	38.5	36.7	38.5	36.7	38.6	36.8	38.7	36.9	38.8	37.0	38.9	37.1
Maximum Power Current	Imp	[A]	9.92	7.84	10.03	7.92	10.13	8.00	10.26	8.10	10.36	8.18	10.47	8.27	10.57	8.35	10.67	8.43
Open Circuit Voltage	Voc	[V]	46.1	43.9	46.2	44.0	46.3	44.1	46.3	44.1	46.4	44.2	46.5	44.3	46.6	44.4	46.7	44.5
Short Circuit Current	Isc	[A]	10.77	8.69	10.82	8.73	10.87	8.77	10.92	8.81	10.97	8.85	11.02	8.89	11.07	8.93	11.12	8.97
Module Efficiency	Eff	[%]	19,4		19,6		19,9		20,2		20,4		20,7		20,9		21,2	
Maximum Series Fuse	IR	[A]	20															
Maximum System Voltage	Vsys	[V]	1.000 VDC / 1.500 VDC (IEC)															

(1) Measurement Tolerances: Pmax (± 3%), Isc & Voc (± 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

Mechanical Data

Dimensions	1719mm x 1140m x 35mm
Weight	22.0 Kg
Cell Type	PERC Mono-166 x 33mm - 340 pcs - M6
Front Glass	3.2mm Tempered and low iron glass + ARC
Backsheet	Anti-aging film
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 2 bypass diodes
Connector	MC4 compatible
Cable	4.0mm² - Length 1200mm or customized

Dimensions



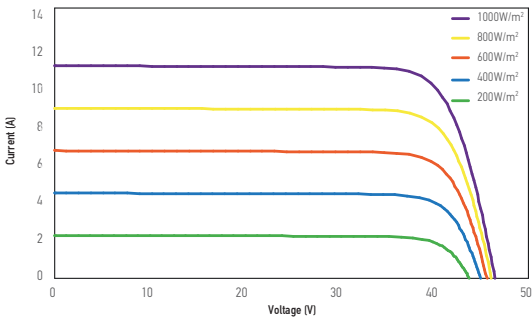
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I-V Curve

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



Temperature Characteristics

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	26
Pieces per Container	806