

SHARP

540W / NU-JD 540

Mono-crystalline PERC Half Photovoltaic Module

Sharp Solar.
The sun is the answer.



Sharp, leader in the solar industry: Shipping more than 15.9 GW globally
Experience in PV technology since 1959



**MULTI-PURPOSE 540 WATT
MONOCRYSTALLINE MODULE
FROM THE WORLD'S TRUSTED
SOURCE FOR SOLAR.**

We select the materials based on what we have learned over the past 6 decades of making modules and validate our choices with rigorous testing that goes well beyond standard test protocols established by UL and the IEC. We have selected high efficiency monocrystalline cells to give you more power and more energy per square meter.

Our warranties are based on real history of past installations beyond the timespans stipulated.

Using breakthrough technology, made possible by over 60 years of proprietary research and development, Sharp's solar modules incorporate an advanced surface texturing process to increase light absorption and improve efficiency.

Common applications include commercial and residential grid-tied roof systems as well as ground mounted arrays. Designed to withstand rigorous operating conditions, this module offers high power output per square meter of solar array.

Product features

- ◆ **Positive Power Tolerance :**
Production controlled positive power tolerance from 0 to + 5W
Only modules will be delivered that have the specified power or more for high energy yield.
- ◆ **High-performance photovoltaic modules:**
Made of monocrystalline PERC Half solar cells with module efficiencies of up to 20.89%.
- ◆ **PID Free:**
Sharp delivers convincing performance in independent test by Fraunhofer.
*PID : potential-induced degradation
- ◆ 10 busbars technology for enhancing the power output

MECHANICAL DATA

Cells	Mono crystalline silicon
No. of cells and connections	144 pcs (72 series cells in parallel)
Dimensions (LxWxD)	2,279×1,134×35mm
Weight	27.8kg
Frame	Al 6063-T5/6005-T6
9lass	AR coating tempered glass
Back sheet	Fluoride or Fluoride-free backsheet
Junction Box	Protection Degree IP68
Cable	4.0 mm; Length as per customer requirement
Connector	Solargiga C1 series, IP-rating 68

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Electrical data (at STC*)

Maximum power	P_{max}	540	W_p
Tolerance of P_{max}		+5% / -0%	
Open-circuit voltage	V_{OC}	50.34	V
Short-circuit current	I_{SC}	13.66	A
Voltage at point of maximum power	V_{mpp}	41.64	V
Current at point of maximum power	I_{mpp}	12.97	A
Module efficiency	η_m	20.89	%

STC = Standard Test Conditions: irradiance 1,000 W/m², AM 1.5, cell temperature 25 °C

Limit values

Maximum system voltage	1,500 VDC
Over-current protection	25A
Temperature range	-40 to +85 °C
Maximum mechanical test load	2,400 Pa

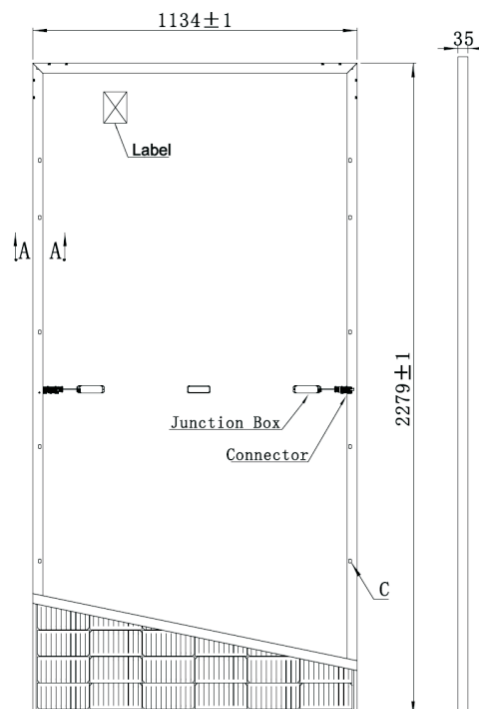
Temperature coefficient

P_{max}	-0.341% / °C
V_{OC}	-0.262% / °C
I_{SC}	+0.054% / °C

Standards and Certification

- * IEC 61215
- * IEC 61730

Rear view



SHARP

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