

SHARP

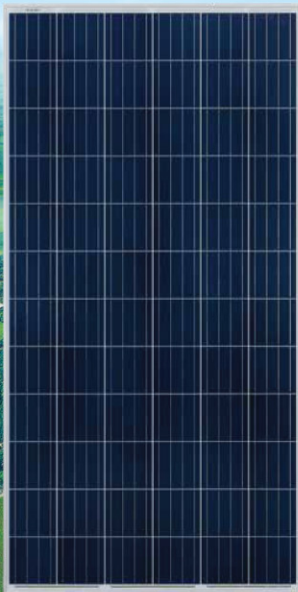
315W | ND-AH315

Polycrystalline silicon photovoltaic modules

Sharp Solar.
The sun is the answer.



Sharp, a leader in the solar industry: Shipping more than 12 GW globally.
Sharp has more than 200MW installation reference in Thailand.
(Picture : 73 MW Solar Power Plant in Lopburi by Sharp EPC)



MULTI-PURPOSE 315 WATT MODULE FROM THE WORLD'S TRUSTED SOURCE FOR SOLAR.

Using breakthrough technology, made possible by over 50 years of proprietary research and development, Sharp's ND-AH315 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 foot of solar array.

Product features

- ◆ **Positive Power Tolerance :**
Production controlled positive power tolerance from 0 to +5 %.
Only modules will be delivered that have the specified power or more for high energy yield.
- ◆ **High-performance photovoltaic modules:**
Made of polycrystalline(156 mm)² silicon solar cells with module efficiencies of up to 16.2 %.
- ◆ **PID Free:**
Sharp delivers convincing performance in independent test by Fraunhofer.
*PID : potential-induced degradation
- ◆ 4 busbars technology for enhancing the power output

315W | ND-AH315

Polycrystalline silicon photovoltaic modules



MECHANICAL DATA	ND-AH315
Cells	polycrystalline, 156 mm square
No. of cells and connections	72 in series(6strings)
Dimensions ((LxWxD)	1,956x992x40 mm
Weight	22.5 kg
Front glass	Low iron tempered glass, 3.2 mm
Frame	Anodized aluminium alloy, silver
Connection Box	IP-rating 67, 3 bypass diodes
Cable	4mm ² /1200±50 mm
Connector	Renhe connector

Electrical data (at STC*)	ND-AH315		
Maximum power	P _{max}	315	W _p
Tolerance of Pmax		+5% / -0%	
Open-circuit voltage	V _{oc}	45.6	V
Short-circuit current	I _{sc}	9.08	A
Voltage at point of maximum power	V _{mpp}	37.2	V
Current at point of maximum power	I _{mpp}	8.47	A
Module efficiency	η _m	16.2	%

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

Electrical Data (NOCT)			
Maximum power	P _{m(W)}	227.1	W
Power Output Tolerance	P _{m(W)}	+5%/0%	W
Maximum Power Voltage	V _{m(V)}	33.8	V
Maximum Power Current	I _{m(A)}	6.72	A
Open Circuit Voltage	V _{oc(V)}	42.2	V
Short Circuit Current	I _{sc(A)}	7.30	A

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Limit values	ND-AH315
Maximum system voltage	1,000 VDC
Overcurrent protection	15 A
Temperature range	-40~+85°C
Maximum mechanical load	2,400 Pa

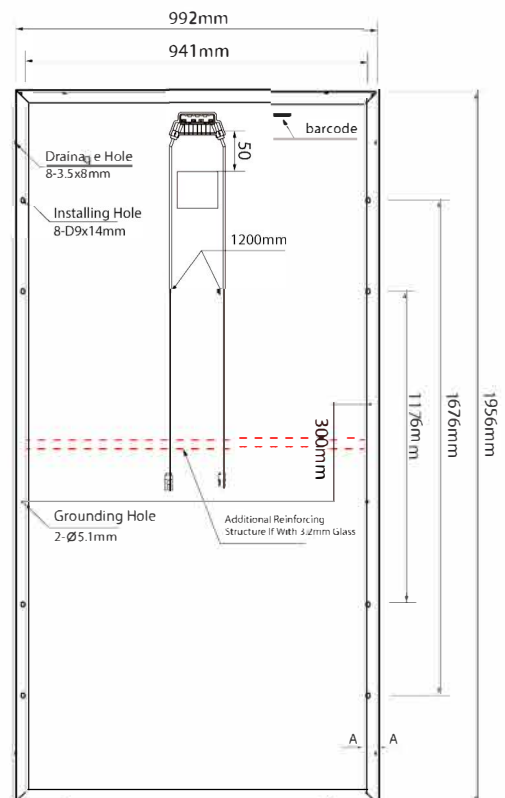
Temperature coefficient	ND-AH315
P _{max}	-0.42 % / °C
V _{oc}	-0.32 % / °C
I _{sc}	+0.05 % / °C

Standards and Certification

- * IEC 61215
- * IEC 61730-1/61730-2 (ed.1)
- * IEC 60904-1/60904-3



Rear view



Back View

SHARP

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