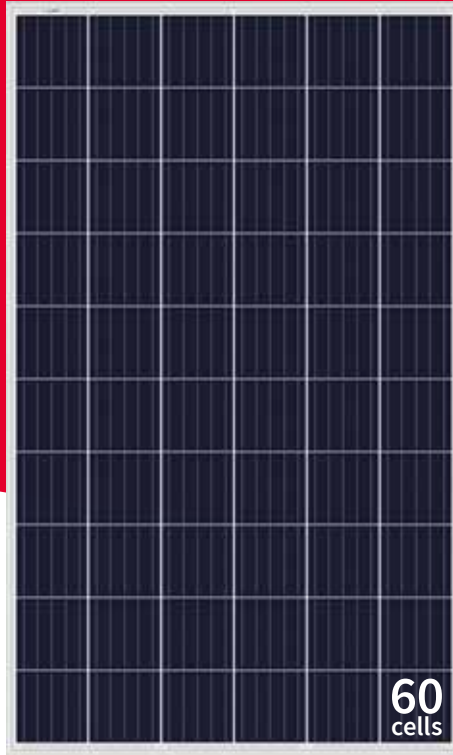


ND-AK270 | ND-AK275

ND-AK Series

270 W | 275 W

The Reliable Solution



Main product features



Guaranteed positive power tolerance (0/+5%)



Polycrystalline silicon photovoltaic modules



Portrait or landscape mounting



Tested and certified
TÜV, IEC/EN61215, IEC/EN61730



Safety class II / CE
Application class A



Fire rating class C



Robust product design
PID resistance test passed
Salt mist test passed (IEC61701)



5 busbar technology
Improved reliability
Higher efficiency
Reduced series resistance

Buy from the solar pioneer



Almost 60 years of solar expertise



Linear power output guarantee



Local support team in Europe



Product guarantee



50 million PV modules installed



Top PV brand award



SHARP
Be Original.

Electrical data (STC)

		ND-AK275	ND-AK270	
Maximum power	P_{max}	275	270	W_p
Open-circuit voltage	V_{oc}	38.5	38.3	V
Short-circuit current	I_{sc}	9.38	9.29	A
Voltage at point of maximum power	V_{mpp}	31.4	31.2	V
Current at point of maximum power	I_{mpp}	8.76	8.65	A
Module efficiency	η_m	16.9	16.6	%

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

Rated electrical characteristics are within ±10% of the indicated values of I_{sc} , V_{oc} and 0 to +5% of P_{max} (power measurement tolerance ±3%).

Reduction of efficiency from an irradiance of 1,000 W/m² to 200 W/m² ($T_{module} = 25 °C$) is less than 3%.

Electrical data (NOCT)

		ND-AK275	ND-AK270	
Maximum power	P_{max}	203.33	199.91	W_p
Open-circuit voltage	V_{oc}	35.6	35.4	V
Short-circuit current	I_{sc}	7.58	7.51	A
Voltage at point of maximum power	V_{mpp}	28.8	28.6	V
Current at point of maximum power	I_{mpp}	7.06	6.99	A

Electrical values measured under nominal operating conditions of cells: 800 W/m² irradiance, air temperature of 20 °C, wind speed of 1 m/s. NOCT: 45 °C (nominal operating cell temperature).

Mechanical data

Length	1,640 mm
Width	992 mm
Depth	35 mm
Weight	18.1 kg

Temperature coefficient

P_{max}	-0.41 %/°C
U_{oc}	-0.32 %/°C
I_{sc}	0.055 %/°C

Limit values

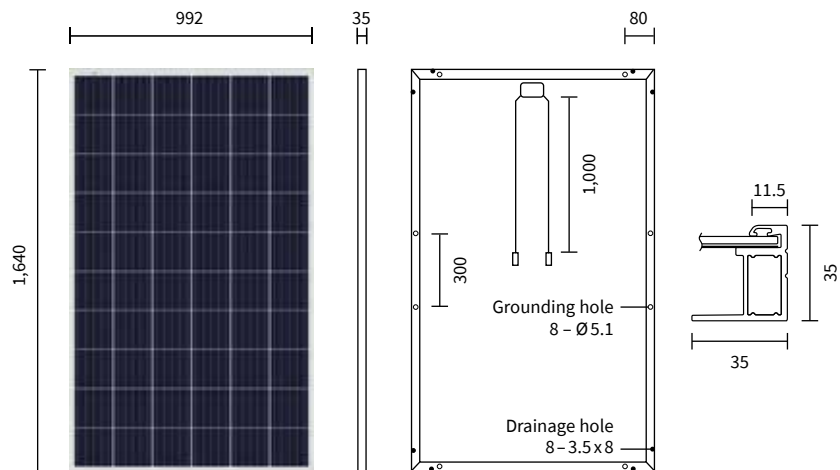
Maximum system voltage	1,000 VDC
Over-current protection	15 A
Temperature range	-40 to 85 °C
Max. mechanical load (snow/wind)	2,400 Pa

Tested snow load (IEC61215 test pass*) 5,400 Pa

Packaging data

Modules per pallet	30 pcs
Pallet size (L × W × H)	1.685 m × 1.155 m × 1.123 m
Pallet weight	approx. 605 kg

Dimensions (mm)



*Please refer to Sharp's installation manual for details.

General data

Cells	polycrystalline Si, 156.75 mm × 156.75 mm, 60 cells in series
Front glass	anti-reflective high transmissive low iron tempered glass, 3.2 mm
Frame	anodized aluminium alloy, silver
Connection box	IP68 rating, 3 bypass diodes
Cable	diameter 4.0 mm ² , length 1,000 mm
Connector	MC4 (Multi Contact, Stäubli Electrical Connectors AG)

Note: Technical data is subject to change without prior notice. Before using Sharp products, please request the latest data sheets from Sharp. Sharp accepts no responsibility for damage to devices which have been equipped with Sharp products on the basis of unverified information. The specifications may deviate slightly and are not guaranteed. Installation and operating instructions are to be found in the corresponding handbooks, or can be downloaded from www.sharp.eu/solar. This module should not be directly connected to a load.