

Noark

A GHINT COMPANY

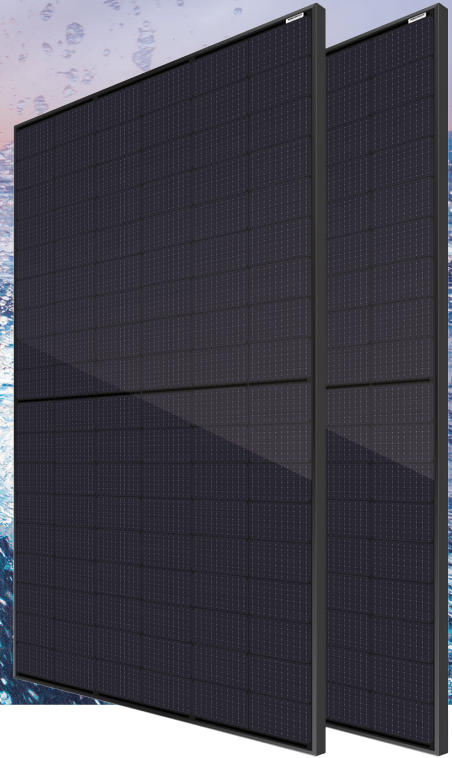
182

ExSM-M-400Wp~420Wp

Monofacial high efficiency mono PV module

21.48%

Module Efficiency 21.48%



PRODUCT FEATURES

High efficiency
The multi-busbar half-cut technology can boost energy density to deliver higher output.

Highly reliable
Certified in TUV salt spray, ammonia corrosion, 2400Pa wind load and 5400Pa snow load testing. Highly reliable.

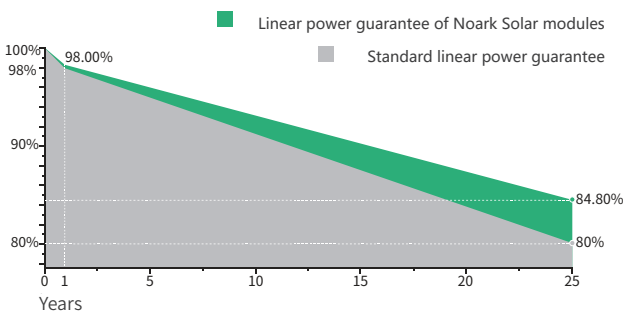
High yield
Effectively reducing BOS costs to achieve lower LCOE and enhanced project profitability.

Low degradation
First-year degradation is less than 2.0%, with linear degradation of 0.55% per year for 25 years.

Low hot-spot risk
The next-generation cell technology and optimized circuit design adopted can support improved temperature coefficient and better hotspot resistance.

Low micro crack risk
The multi-busbar technology contributes to more effective prevention of Micro crack and broken busbars.

LINEAR PERFORMANCE WARRANTY



12 YEARS product warranty

25 YEARS linear power warranty

0.55% Linear attenuation of 0.55% per year within 25 years

CERTIFICATES

- IEC 61215, IEC 61730
- ISO 9001: 2005 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational health and safety management systems



Quality casting value

Electrical Data (STC)

Maximum Power (Pmax/W)	400	405	410	415	420
Open Circuit Voltage (Voc/V)	36.96	37.11	37.26	37.41	37.56
Short Circuit Current (Isc/A)	13.60	13.70	13.79	13.89	13.98
Voltage at Maximum Power (Vmp/V)	31.00	31.15	31.30	31.45	31.60
Current at Maximum Power (Imp/A)	12.91	13.01	13.10	13.20	13.30
Module Efficiency (%)	20.48	20.74	21.00	21.25	21.51
Operating Temperature	-40° C~+85° C				
Maximum System Voltage	1000/1500V				
STC (Standard Testing Conditions): Irradiance 1000W/m ² , Cell Temperature 25°C , AM1.5					

Electrical Data (NMOT)

Maximum Power (Pmax/W)	300	304	308	312	316
Open Circuit Voltage (Voc/V)	33.97	34.12	34.27	34.42	34.57
Short Circuit Current (Isc/A)	11.10	11.18	11.27	11.35	11.43
Voltage at Maximum Power (Vmp/V)	28.19	28.34	28.49	28.64	28.79
Current at Maximum Power (Imp/A)	10.65	10.73	10.82	10.90	10.98

NMOT (Nominal Module Operating Temperature): Irradiance 800W/m², Ambient Temperature 20°C , AM1.5, Wind Speed 1m/s.

Mechanical Data

Cell Type	182×91mm Mono
Cell Orientation	108(6×18)
Module Dimensions	1722×1134×30mm
Weight	21.0kg
Glass	3.2mm high transmittance, reinforced glass
Backsheet	Anti-aging film(Black)
Frame Material	Anodized aluminum alloy(Black)
Junction Box	Protection class IP68
Cable	4.0 mm ² positive pole: 1200 mm negative pole: 1200mm wire length can be customized
Connector	MC4 compatible / Staubli Evo 2 connectors

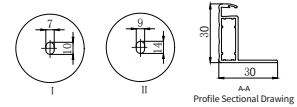
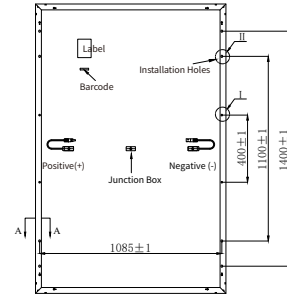
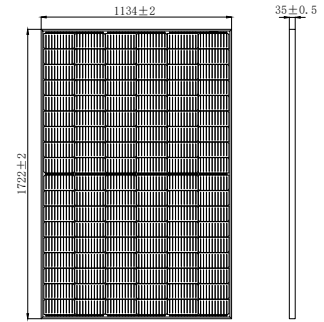
Temperature Coefficients

Temperature Coefficient (Pm)	-0.340%/°C
Temperature Coefficient (Voc)	-0.270%/°C
Temperature Coefficient (Isc)	0.048%/°C
NMOT (Nominal Module Operating Temperature)	41±3°C

Packaging

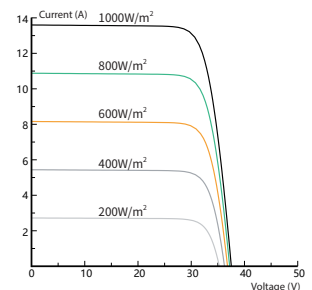
Transportation methods	Number of modules per cabinet	Number of modules per pallet
40HQ container	936pcs	36pcs+36pcs

Module Dimensions (mm)



I-V Curve

Current-Voltage Curve(420W)



Power-Voltage Curve(420W)

