

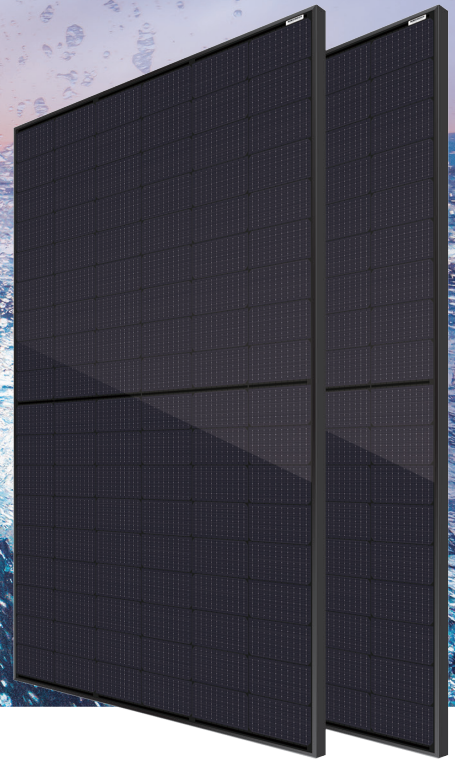
# NOARK

A CHINT COMPANY

## ExSM-M-400~420Wp 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.

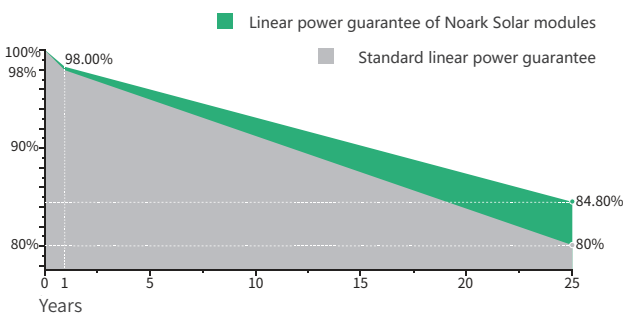
**High yield**  
Effectively reducing BOS costs to achieve lower LCOE and enhanced project profitability.

**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 <sup>2</sup> , 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/m<sup>2</sup>, Ambient Temperature 20°C , AM1.5, Wind Speed 1m/s.

## Mechanical Data

Cell Type	182×91mm Mono
Cell Orientation	108(6×18)
Module Dimensions	1722×1134×35mm
Weight	22.0kg
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 <sup>2</sup> positive pole: 1200 mm negative pole: 1200mm wire length can be customized
Connector	MC4 compatible / Staubli Evo 2 connectors

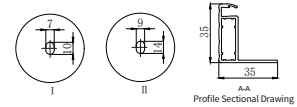
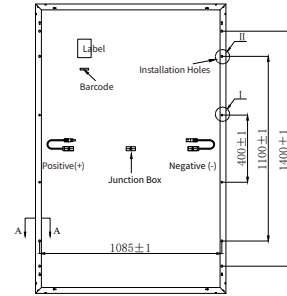
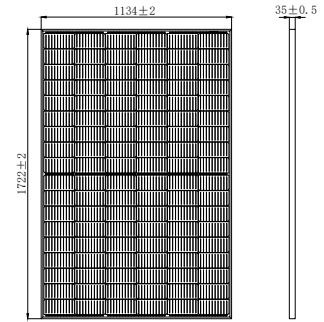
## Temperature Coefficients

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

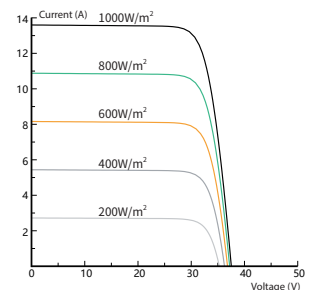
Transportation methods	Number of modules per cabinet	Number of modules per pallet
40HQ container	806pcs	31pcs +31pcs

## Module Dimensions (mm)



## I-V Curve

Current-Voltage Curve(420W)



Power-Voltage Curve(420W)

