

DANDELION

Light, flexible, perfect

(PKQJH57J-420W | 2nd Gen.)

More hotspot resistance

based on our new PEC technology

More contact reliability

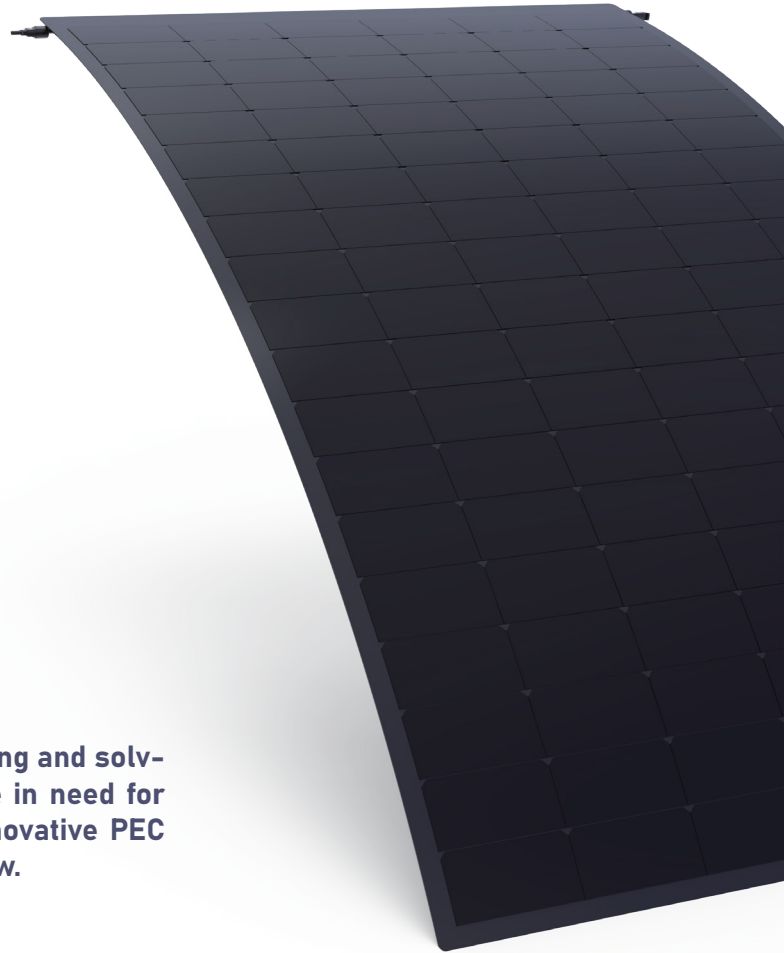
as there are no contact ribbons used

More moisture barrier

as the more layers form a vapor barrier

More efficiency

as the cell conversion is up to 26% and performance been optimized by lower temperature



The next level of lightweight photovoltaic – addressing and solving challenges of people and companies which are in need for glass and lightweight photovoltaic by using our innovative PEC and U-IBC technology – while keeping the weight low.

- Higher output – 2% more out of every module due to “miss” of busbars in the front of the cell and no shade created
- Higher reliability – as the lower degradation rate, superiority in fire-resistance, excellent performance in dynamic load (wind, snow, hail etc.) make them more durable and reliable
- Higher performance – due to optimized heat transmission using copper



Product Warranty



Linear Performance Warranty

For details regarding tests and certificates please refer to the rear page.



22.2%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

≤2%
FIRST YEAR
POWER DEGRADATION

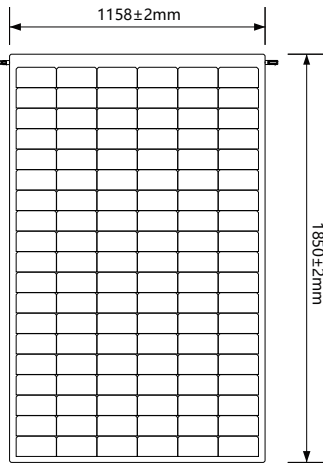
0.55%
YEAR 2-25
POWER DEGRADATION

U-IBC HALF-CELL
Lower operating temperature

TYPICAL ELECTRICAL PARAMETERS

Model	PKQJH57J410		PKQJH57J415		PKQJH57J420		PKQJH57J425		PKQJH57J430	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated Power (Pmpp) /W	410	309	415	313	420	317	425	320	430	324
Rated Current (Imp) /A	11.97	9.57	12.03	9.63	12.10	9.68	12.16	9.74	12.23	9.79
Rated Voltage (Vmpp) / V	34.31	32.30	34.53	32.50	34.74	32.71	34.96	32.91	35.17	33.11
Short Circuit Current (Isc) /A	12.80	10.47	12.88	10.53	12.95	10.60	13.03	10.66	13.10	10.72
Open Circuit Voltage (Voc) /V	40.96	38.97	41.18	39.18	41.39	39.39	41.61	39.59	41.82	39.80
Effective Module Efficiency(η) /%	21.17%		21.43%		21.69%		21.94%		22.20%	

STC (Standard Testing Conditions): Irradiance 1000W/m², Air Mass 1.5, Cell Temperature 25°C, Measuring Tolerance ±3%
NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Air Mass 1.5, Wind speed 1m/s



ABSOLUTE MAXIMUM RATING

Operating Temperature	From -40 to +85 °C
Maximum Series Fuse Rating	25 A
Safety Class	II
Fire Rating (IEC 61730)	C
Maximum System Voltage	DC 1500V

MECHANICAL CHARACTERISTICS

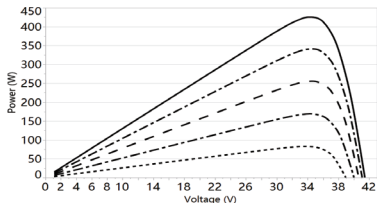
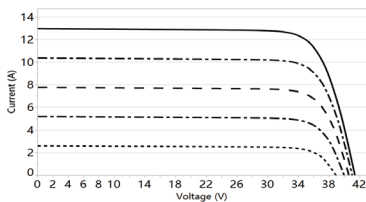
Cell Type	Mono-crystalline U-IBC 182 mm × 91.9 mm, 114 (6x19)
Effective Module Dimension(L×W)	1763.6mm×1098.2mm
Dimension (L×W×H)	1850 mm x 1158mm x 2mm(72.8x45.6x0.07 inches)
Weight	5.2±0.3kg
Cable	4 mm ² (IEC), 4.50 m m or customized length
Junction Box	IP 68 with three bypass diodes
Connector	Original MC4

TEMPERATURE RATINGS

Voltage Temperature Coefficient	-0.220%/°C
Current Temperature Coefficient	+0.050%/°C
Power Temperature Coefficient	-0.240%/°C
Tolerance	0 ~ +5 W
NOCT	43 ± 2°C

PACKING CONFIGURATION

40'HQ Container	Pallet/container	Piece/container
Pieces (126 pcs per pallet)	18	2268



Test&classifications

- CE passed (according to low voltage directive (LVD) (2014/35/EU)
- Sand/dust: IEC 60068-2-68: 1994 modified
- Salt mist: IEC 61701:2020 / EN IEC 61701:2020
- Potential Induced Degradation (PID): IEC TS 62804-1:2015 modified
- Ammonia (NH₃): IEC 62716: 2013 / EN 62716: 2013

- Design qualification
 - IEC 61215-1:2021 / EN IEC 61215-1:2021;
 - IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021;
 - IEC 61215-2:2021 / EN IEC 61215-2:2021;
- Construction requirements&safety
 - IEC 61730-1:2023;
 - IEC 61730-2:2023.

- Classification of external fire exposure
 - Class E (acc. DIN EN 13 501-1 : 2019)
 - Broof (t1) (for roofing-pitches < 20°) (acc. DIN EN 13 501-5: 2016 using test data from external fire exposure to roofs)

