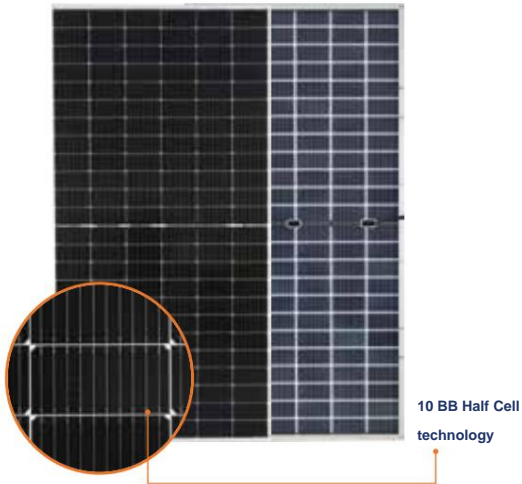


Full of Energy *in Every Aspect ...*

M10-144 CAM-CAM

DOUBLE SURFACE HALF CELL
FRAMED MODULE



- 510 - 555 WATTS**
- EFFECTIVE MODULE EFFICIENCY UP TO 23.40%**
- 30 YEAR LINEAR PERFORMANCE WARRANTY**
- 12 YEAR PRODUCT WARRANTY**

Bifaciality Effect Maximizing Efficiency
Dual-surface module design that increases efficiency by generating electricity from the back surface as well as the front surface.

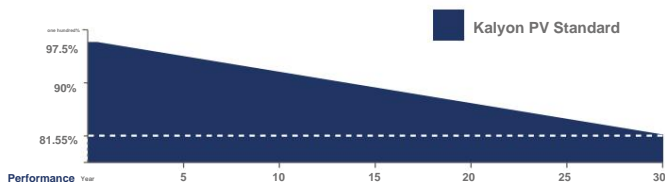
PERCeffect
Cell technology, which is the most widely used in the world and allows energy production from both surfaces.

M10 Half Cell Technology
Increasing the energy production of the module M10 size half cell technology.

Highly Durable, Long Lasting
conducted in independent testing organizations PID, LID, Intensified Stress High success in challenging tests such as

- PID Resistance
- LID Resistance
- LeTID Resistance
- condensed Aging Resistance
- Ammonia Resistance
- Powder Sand Corrosion Resistance
- Hail Resistance
- Salt Corrosion Resistance

PERFORMANCE GUARANTEE



The average annual power loss from the 2nd year to the 30th year will not be more than 0.55%.

CERTIFICATES

ISO Certificates: ISO 9001 / ISO 14001 / ISO 45001 / ISO 50001 / ISO 27001
IEC Certificates: IEC 61215: 2018 / IEC 61730-1: 2018
 IEC 61730-2 : 2018 / IEC 61701 / IEC 62716 / IEC 62804 PID IEC 63209-1 / IEC 63342 / IEC 60068-2-68 / IEC 62759-1
UL Certification: UL 61730-1-2

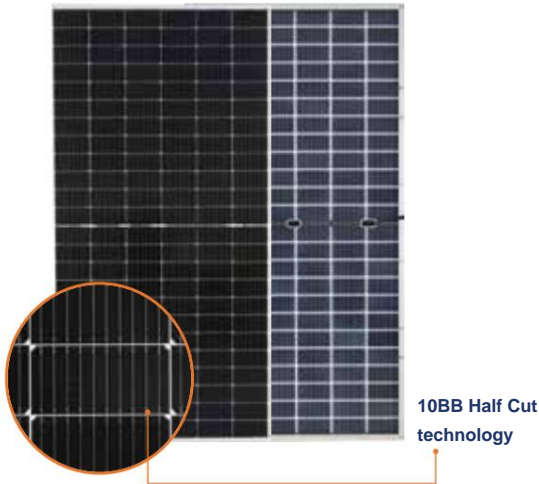


KY-510B-72H-GF, KY-515B-72H-GF, KY-520B-72H-GF, KY-525B-72H-GF, KY-530B-72H-GF, KY-535B-72H-GF, KY-540B-72H-GF, KY-545B-72H-GF, KY-550B-72H-GF, KY-555B-72H-GF

Energy at **Double Side...**

M10-144 DOUBLE GLASS

**BIFACIAL HALF CUT
FRAMED MODULE**



- 510 - 555 WATTS**
- UP TO 23.40% EFFECTIVE MODULE EFFICIENCY**
- 30 YEARS POWER OUTPUT WARRANTY**
- 12 YEARS PRODUCT WARRANTY**

Maximizing Efficiency with Bifaciality Effect
Bifacial module design that increases efficiency by generating electricity from the rear side as well as from the front side.

PERCeffect
The most widely used cell technology worldwide, allowing energy production from both of its surfaces.

M10 Half Cut Cell Technology
M10-sized half-cell technology that enhances the energy production of the module.

Durable & Long Lasting
High success in rigorous tests such as PID, LID, Extended Stress Test by independent testing organizations.



PID Resistance



LID Resistance



LeTID Resistance



Extended Stress Resistance



ammonia Resistance



Dust Sand Corrosion Resistance

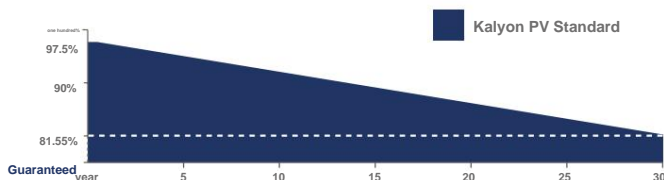


Hail Resistance



Pure Corrosion Resistance

PERFORMANCE WARRANTY



From the 2nd year to the 30th year, the average annual power decline will be no more than 0.55%.

CERTIFICATES

ISO Certificates: ISO 9001 / ISO 14001 / ISO 45001 / ISO 50001 / ISO 27001
IEC Certificates: IEC 61215: 2018 / IEC 61730-1: 2018
 IEC 61730-2 : 2018 / IEC 61701 / IEC 62716 / IEC 62804 PID IEC 63209-1 /
 IEC 63342 / IEC 60068-2-68 / IEC 62759-1
UL Certificate: UL 61730-1-2

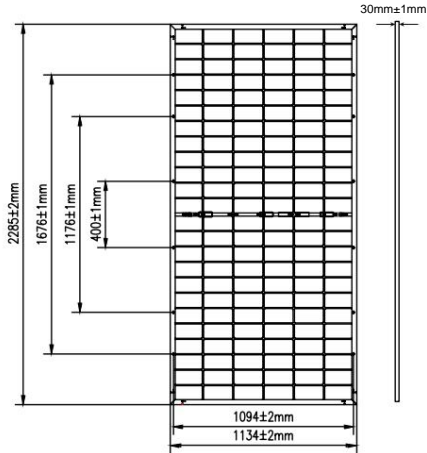


KY-510B-72H-GF, KY-515B-72H-GF, KY-520B-72H-GF, KY-525B-72H-GF,
 KY-530B-72H-GF, KY-535B-72H-GF, KY-540B-72H-GF, KY-545B-72H-GF,
 KY-550B-72H-GF, KY-555B-72H-GF

Energy at Double Side...

M10-144 DOUBLE GLASS

BIFACIAL HALF CUT FRAMED MODULE



STRUCTURAL PARAMETERS

cell	Type	Mono-C Silicon Bifacial PERC	module To you	length	2285mm±2mm
	number	144 Pcs Half Cut Cell		Width	1134mm±2mm
	To you	182mm x 91mm		Thickness	30mm±1mm
Junction box	Bypass Diode	3Pcs	mounting Dimensions	Mounting Hole Number	12
	degree of Protection	IP68		Mounting Hole Sizes	9mm x 14mm Radius 4.5mm
	cable length	30cm		Long Side Mounting Hole Spacing (Vertical Axis)	1676/1176/400±1mm
	Connector	MC4 Compatible		Long Side Mounting Hole Spacing (Horizontal Axis)	1094±2mm
	Rated Current	30A		Weight	30mm Frame 32 kg ± 5%
glass	AR Coating Half Tempered, 2.0 mm Thickness		Grounding Holes	number	8
				Radius	L: 4mm

ELECTRICAL PARAMETERS

Model	510		515		520		525		530		535		540		545		550		555	
Test Conditions	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**	STC*	BNPI**
Maximum Power (Pmax) [W]	510	558.33	515	563.65	520	569.07	525	574.18	530	579.45	535	585.05	540	590.25	545	595.59	550	600.92	555	606.24
open circuit Voltage (Voc) [V]	48.78	48.95	48.93	49.10	49.08	49.25	49.23	49.40	49.38	49.55	49.53	49.70	49.68	4985	4983	5000	49.98	50.15	50.13	50.30
short circuit Current (Isc) [A]	13.46	14.72	13.50	14.76	13.54	14.81	13.59	14.85	13.63	14.90	13.67	14.94	13.71	14.99	13.75	15.03	13.80	15.08	13.84	15.12
Maximum Power Voltage (Vmp) [V]	39.92	39.14	40.16	39.40	40.40	39.66	40.63	39.92	40.87	40.20	41.11	40.47	41.35	40.70	41.58	40.98	41.82	41.24	42.06	41.50
Maximum Power Current (Imp) [A]	12.78	14.27	12.83	14.31	12.88	14.35	12.92	14.38	12.97	14.41	13.02	14.46	13.06	14.50	13.11	14.54	13.15	14.57	13.20	14.61
PV Module Effective Efficiency [%]	19.68	21.55	19.87	21.75	20.06	21.96	20.25	22.16	20.45	22.36	20.85	22.58	20.83	22.78	21.03	22.99	21.22	23.9	21.40	23.40
short circuit Current (Isc) [A]***	16.25		16.30		16.35		16.40		16.45		16.50		16.55		16.60		16.65		16.70	
Bifaciality Rate [%]	+0.69 ± 0.03																			

Measurement Tolerances are, For Pmax: ±2.5%, For Voc and Isc: ±5%.

* Standard Test Conditions (STC): Irradiance 1000 W/m², Air Mass 1.5, Module Temperature 25 °C.

** Values are given according to BNPI conditions. Bifacial nameplate irradiance is that which corresponds to 1000 W/m² on the module front, and 135 W/m² on the module rear.

*** Values are given according to BSI conditions. Bifacial stress irradiance, which corresponds to 1000 W/m² on the module front, and 300 W/m² on the module rear. Measurement Tolerance is, For Isc: ±5%.

BIFACIALITY COEFFICIENT

γ _{Pmax} (%) Maximum Power Bifaciality Coefficient	0.69±3%
γ _{Isc} (%) Short-Circuit Current Bifaciality Coefficient	0.72±3%
γ _{Voc} (%) Open-Circuit Voltage Bifaciality Coefficient	0.99±1%

WORKING CONDITIONS

System Voltage	1500VDC	Maximum Static Mechanical Load	negative	-3600Pa
			positive	+5400Pa
Operating temperature	-40 ~+ 85 °C	Fire Type: 29	Protection Type: Class II	Maximum Protection Current: 30 A

PS: The resistance load achievable when installation is performed according to the mounting type corresponding to the relevant maximum resistance load in the installation guide.

TEMPERATURE COEFFICIENTS

Isc Temperature Coefficient	+0.04%/°C
Voc Temperature Coefficient	-0.28%/°C
Pmax Temperature Coefficient	-0.37%/°C

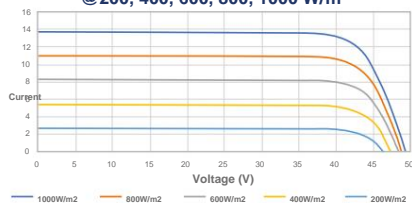
OPEN TRAILER PACKAGING

Number of Modules Per Pallet	30, 35
Number of Pallets Per Open Trailer	11, 21
Number of Modules Per Open Trailer	385, 735

CONTAINER PACKING

Container Type	40' HC	Number of Modules Per Pallet	30, 35
Number of Pallets Per Container	18 (max)	Number of Modules Per Container	540, 630

FRONT SIDE IV CURVE
@ 200, 400, 600, 800, 1000 W/m²



REAR SIDE IV CURVE
@ 1000W/m² and 200W/m²

