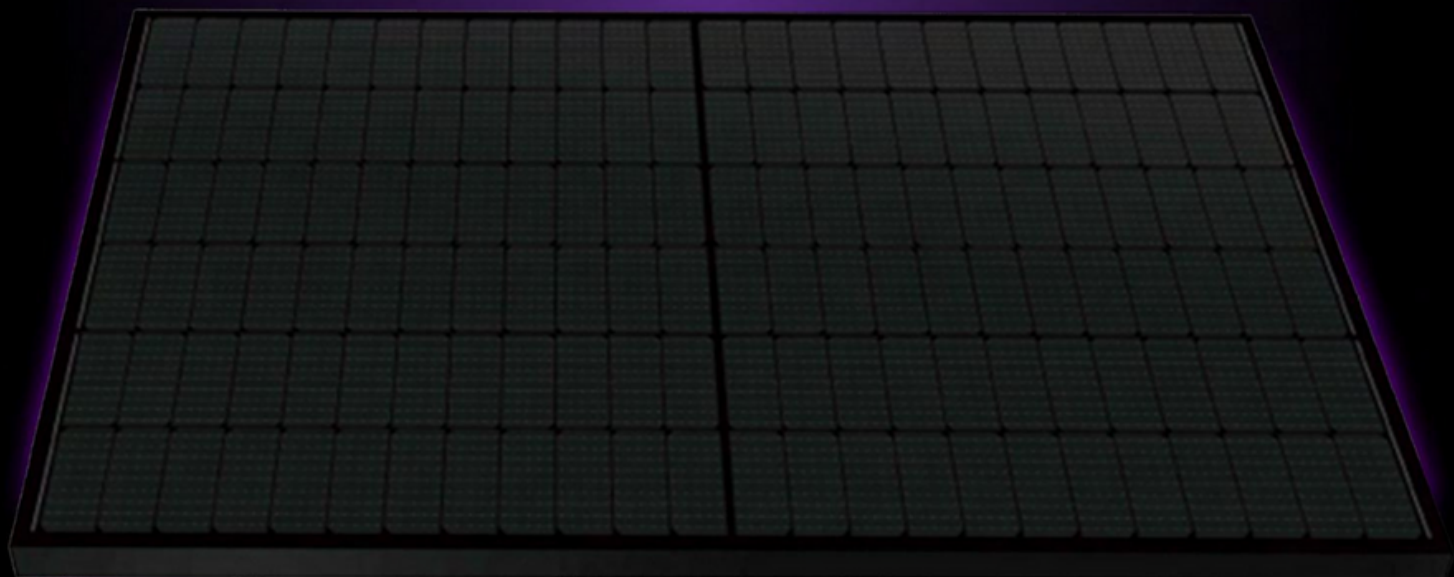




PHASELUX

THE FUTURE IS YOURS



SYMPHONY PLUS

up to **450 Wp**

Up to 230 W/m²

FULL BLACK



BIFACIAL HJT HALF-CUT CELLS
PID PROTECTION
100% PLUS GRADING

1.6 MM GLASS



LIGHTWEIGHT



AMMONIA RESISTANT
SALT-SPRAY RESISTANT
RESISTANT AGAINST HAILSTORM



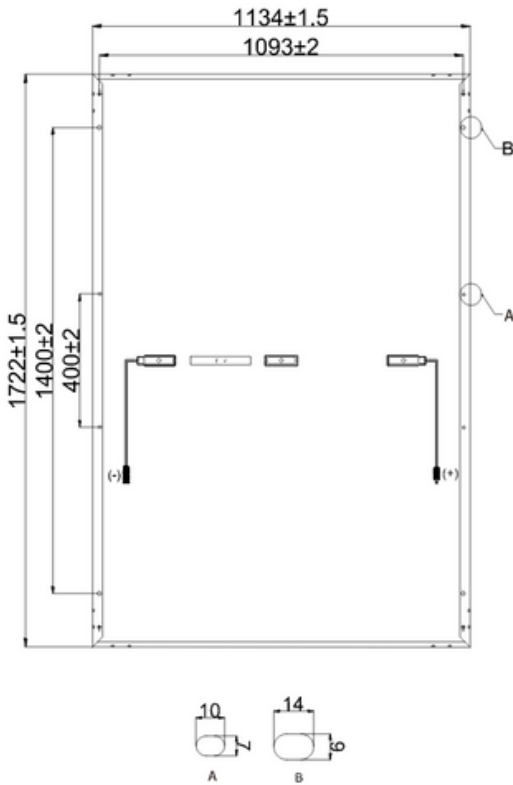
GUARANTEE & SERVICE



Own supplementary guarantee fund up to 35 years and maximum 1000 kWp.*
Direct service from the Phaselux Group Netherlands. * see terms www.phaselux.com/warranty

Engineering Drawings

Unit: mm



Electrical Characteristics (STC*)

Model	PL-S108	PL-S108	PL-S108	PL-S108	PL-S108
	DSB430	DSB435	DSB440	DSB445	DSB450
Maximum Power (Pmax)	430W	435W	440W	445W	450W
Module Efficiency (%)	22.02%	22.28%	22.53%	22.79%	23.04%
Optimum Operating Voltage (Vmp)	34.60V	34.86V	35.12V	35.38V	35.63V
Optimum Operating Current (Imp)	12.43A	12.48A	12.53A	12.58A	12.63A
Open Circuit Voltage (Voc)	40.87V	41.14V	41.41V	41.68V	41.94V
Short Circuit Current (Isc)	12.95A	13.00A	13.05A	13.10A	13.15A
Operating Module Temperature	-40 ~ +85 °C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	25A				
Power Tolerance	0~+5W				

*STC: Irradiance 1000 W/m², cell temperature 25 °C, AM=1.5. Tolerance of Pmax is within +/- 3%.

NOCT**

Maximum Power (Pmax)	327W	331W	335W	338W	342W
Optimum Operating Voltage (Vmp)	32.64V	32.91V	33.17V	32.34V	33.60V
Optimum Operating Current (Imp)	10.02A	10.06A	10.10A	10.14A	10.18A
Open Circuit Voltage (Voc)	39.01V	39.26V	39.52V	39.78V	40.03V
Short Circuit Current (Isc)	10.44A	10.48A	10.52A	10.56A	10.60A

**NOCT: Irradiance 800W/m², Ambient Temperature 20 °C, Wind Speed 1m/s.

Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 C ± 2 C
Temperature Coefficient of Pmax	-0.26%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	0.04%/°C

Safety & Warranty

Safety Class	Class II
Product Warranty	35 yrs Workmanship
Performance Warranty	35 yrs Linear Warranty*

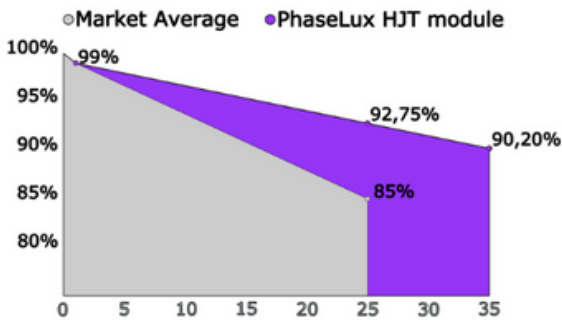
*Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0,26%, and the power is no less than 90,2% until the 35th year.

Mechanical Characteristics

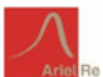
Cell Type	HJT Mono 182 × 91.75mm
Cell Connection	108 (6 × 18)
Module Dimension	1722 x 1134 x 30 mm
Weight	22 kg
Junction Box	IP68
Output Cable	4mm ² , 1200mm in length, length can be customized / UV resistant
Connectors Type	MC4 original
Frame	Anodised aluminum alloy
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	(F) 1.6mm anti-reflective solar glass (B) 1.6mm solar glass

Shipping Configurations

Container Size	HC
Pallets Per Container	26
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	936



*refer to www.phaselux.com for special warranty details



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