

ES-DP8-H72

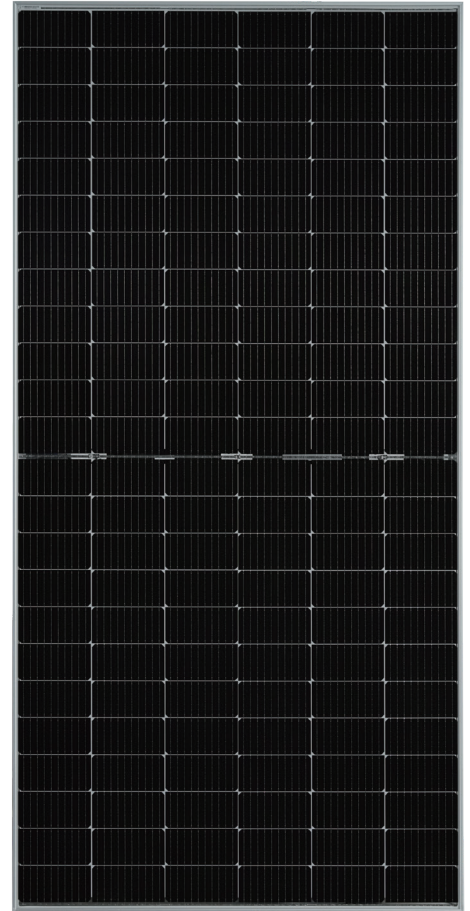
525-550W

P-Type

Bifacial & Dual Glass

144 Pieces

Half-Cell



High Conversion Efficiency

Module efficiency up to 21.3% with advanced P-Type cell technology



Excellent weak light performance

More power output in weak light condition, such as cloudy days, morning and sunset



Extended mechanical performance

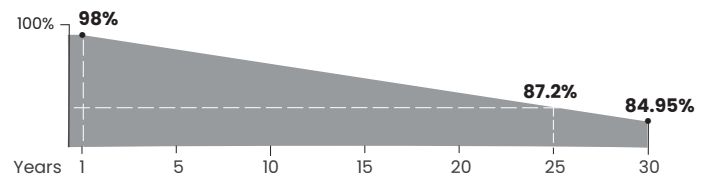
Module certified to withstand extreme wind (2400 Pa) and snow loads (5400 Pa)



Quality Guarantee

High module quality ensures long-term reliability

- **12 Years** warranty for materials and workmanship
- **30 Years** warranty for extra linear power output
- 1st year < **2%**, annual degradation < **0.45%**



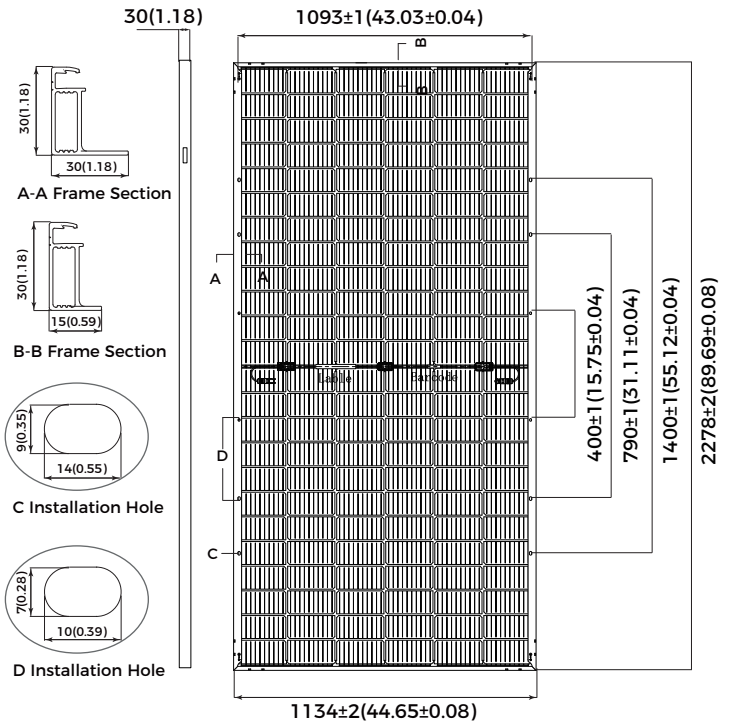
ES Foundry P-Type Dual Glass Product Performance Warranty

Mechanical Parameters

Solar Cell	Mono PERC 182mm
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 30mm(89.69× 44.65 × 1.18in.)
Weight	31.8kg(70.11lbs)
Junction Box	IP68 rated (3 bypass diodes)
Output Cable	4mm ² (IEC), 12 AWG(UL) +400/-200mm (+15.75/-7.87in.) or customized
Connector	EVO2A, Z4S or similar
Front Cover	2.0mm (0.079in.)semi-tempered AR glass
Back Cover	2.0mm (0.079in.)semi-tempered glass
Container	36 pcs/Pallet, 576 pcs/40' HC 36 pcs/Pallet, 576 pcs/53' DV

Operating Parameters

Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40°C ~ +85°C(-40°F ~ +185°F)
Max. Fuse Rating	25A
Frontside Max. Loading	5400Pa(112lb/ft ²)
Backside Max. Loading	2400Pa(50lb/ft ²)
Bifaciality	70%±5%
Fire Resistance	UL Type 29



Electrical Characteristics - STC

Irradiance 1000 W/m², cell temperature 25 °C, AM1.5, Test uncertainty for Pmax: ±3%

Maximum Power at STC (Pmax/W)	550	545	540	535	530	525
Power Tolerance (W)	0 ~ +5					
Optimum Operating Voltage (Vmp/V)	41.96	41.80	41.64	41.47	41.31	41.15
Optimum Operating Current (Imp/A)	13.11	13.04	12.97	12.90	12.83	12.76
Open Circuit Voltage (Voc/V)	49.90	49.75	49.60	49.45	49.30	49.15
Short Circuit Current (Isc/A)	14.00	13.93	13.86	13.79	13.72	13.65
Module Efficiency	21.3%	21.1%	20.9%	20.7%	20.5%	20.3%

Electrical Characteristics - NOCT

Irradiance 800 W/m², ambient temperature 20 °C, AM1.5, wind speed 1 m/s.

Maximum Power at NMOT (Pmax/W)	416.0	412.2	408.5	404.6	400.8	397.1
Optimum Operating Voltage (Vmp/V)	39.79	39.64	39.49	39.33	39.18	39.02
Optimum Operating Current (Imp/A)	10.46	10.40	10.34	10.29	10.23	10.18
Open Circuit Voltage (Voc/V)	47.32	47.18	47.04	46.89	46.75	46.61
Short Circuit Current (Isc/A)	11.30	11.24	11.18	11.13	11.07	11.01

Rearside Power Gain (Reference to 550W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	578	633	688
Optimum Operating Voltage (Vmp/V)	41.96	42.06	42.06
Optimum Operating Current (Imp/A)	13.76	15.04	16.35
Open Circuit Voltage (Voc/V)	49.90	50.00	50.00
Short Circuit Current (Isc/A)	14.70	16.07	17.46
Module Efficiency	22.4%	24.5%	26.6%

Temperature Characteristics

Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.048%/°C

