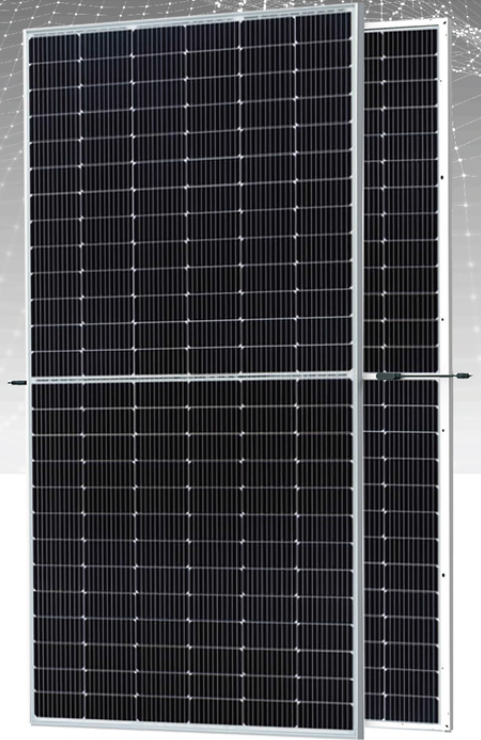


590W-605W

XP-590W-78MET Bifacial

High Efficiency Half- Cell Mono PERC Module
The solar cells made of silicon



Comprehensive Products and System Certificates

- OHSAS 18001: Occupational Health and Safety Management System
- ISO 14001: Environmental Management System
- ISO 9001: Quality Management System



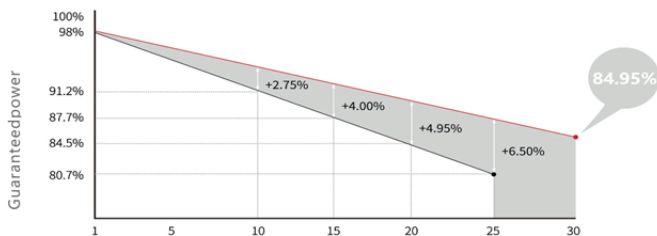
Linear Performance Warranty

15
YEARS

Product quality & process guarantee

30
YEARS

Linear power guarantee



Product Insurance



Half-cut cell technology
New circuit design
lower internal current, lower R_s loss



3 times EL test to ensure best quality



Resistant to salt-spray corrosion
(IEC61701, certified to TUV Rheinland test standard)



Special circuit design
With much lower hot spot temperature



Resistant to power
Attenuation passed TUV Rheinland system voltage endurance test

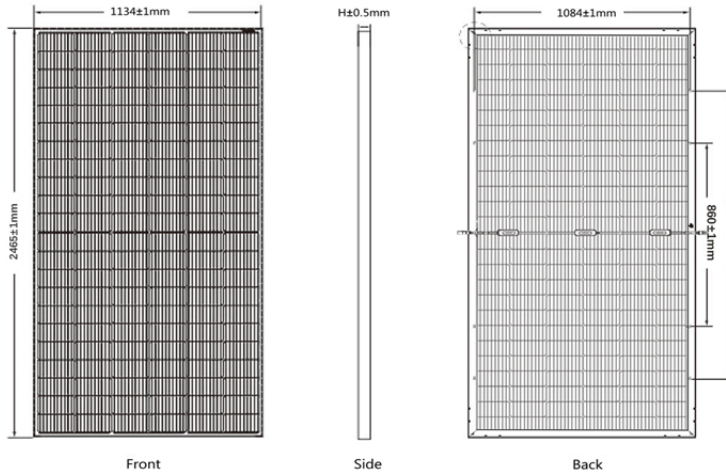


Special cell process ensures great performance under low irradiance conditions

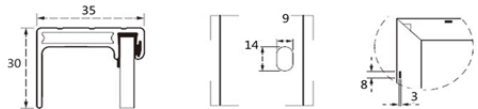
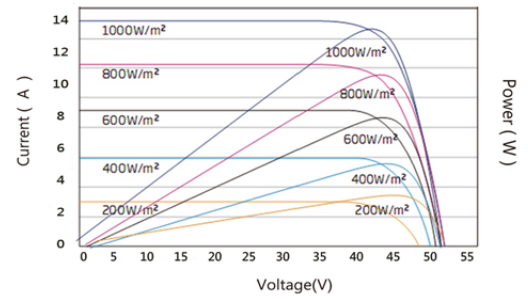
XP-(590W-605W)-78MET Bifacial

Monocrystalline Module

DESIGN



Current-Voltage & Power-Voltage Curves(590W)



STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2465 x 1134 x 35 mm
Weight	30 kg
Number of cells	156 cells
Cell	PERC Monocrystalline 182 x 91mm
Glass	Tempered 3.2mm AR, High transmittance, Low iron
Frame	Anodized aluminium alloy
Junction box	IP68, 3 diodes
Output wire	4.0mm², wire length: 1900mm
Connector	MC4 Compatible
Mechanical load	5400Pa

TEMPERFORMANCE RATINGS

Temperature coefficient (P_{max})	-0.35%/°C
Temperature coefficient (V_{oc})	-0.27%/°C
Temperature coefficient (I_{sc})	+0.05%/°C
Nominal operating cell temperature	45±2°C

OPERATING PARAMETERS

Power tolerance (W)	(0,+5)
Maximum system voltage (V)	1500V
Maximum rated fuse current (A)	25
Current operating temperature (°C)	-40~+85°C

ELECTRIC CHARACTERISTICS

Model of modules	XP-590W-78MET Bifacial		XP-600W-78MET Bifacial		XP-605W-78MET Bifacial	
	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power – P_{mp} (W)	590	441.0	600	448.5	605	452.2
Open-circuit voltage – V_{oc} (V)	54.03	50.49	54.40	50.91	54.63	51.09
Short-circuit current – I_{sc} (A)	13.86	11.18	14.01	11.25	14.07	11.30
Maximum power voltage – V_{mp} (V)	44.63	41.62	45.03	42.01	45.22	42.23
Maximum power current – I_{mp} (A)	13.22	10.60	13.33	10.68	13.38	10.71
Module efficiency – η_m (%)	21.1%		21.5%		21.6%	
Module efficiency w/m²	211.1W		214.6W		216.4W	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

Reference front power	590	600	605	590	600	605	590	600	605	590	600	605	590	600	605
Pmax gain	Pmax/W			Voc/V			Isc/A			Vmp/V			Imp/A		
5%	620	630	635	54.03	54.40	54.63	14.54	14.61	14.70	44.63	45.03	45.22	13.90	14.00	14.05
10%	649	660	666	54.03	54.40	54.63	15.24	15.31	15.40	44.63	45.03	45.22	14.55	14.66	14.73
15%	679	690	696	54.13	54.50	54.73	15.89	16.00	16.07	44.73	45.13	45.32	15.18	15.29	15.36
20%	708	720	726	54.13	54.50	54.73	16.58	16.70	16.75	44.73	45.13	45.32	15.83	15.96	16.02
25%	738	750	756	54.13	54.50	54.73	17.26	17.39	17.46	44.73	45.13	45.32	16.50	16.62	16.69

Electrical characteristics with different rear side power gain

XPPOWER
LIGHT UP THE WORLD

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Email: info@xpowersolar.com

Specifications included in this datasheet are subject to change without notice.