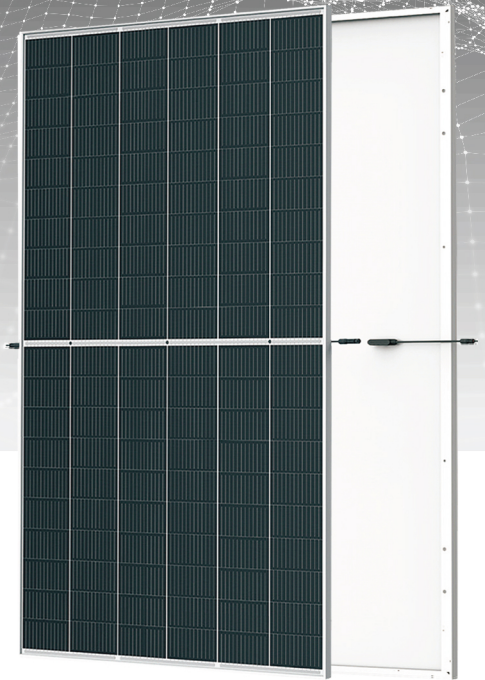


# 590W-610W



## XP-MH60H-590W-610W

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

### Comprehensive Products and System Certificates

- OHSAS 1 8001: Occupational Health and Safety Management System
- ISO 1 4001: Environmental Management System
- ISO 9001: Quality Management System



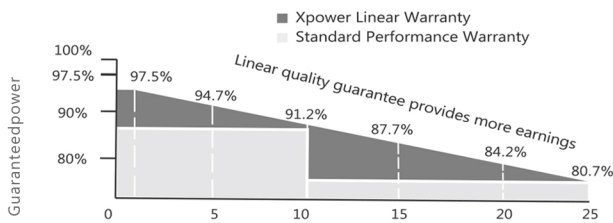
### Linear Performance Warranty

**15**  
YEARS

Product  
quality & process  
guarantee

**25**  
YEARS

Linear power  
guarantee



Product Insurance



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

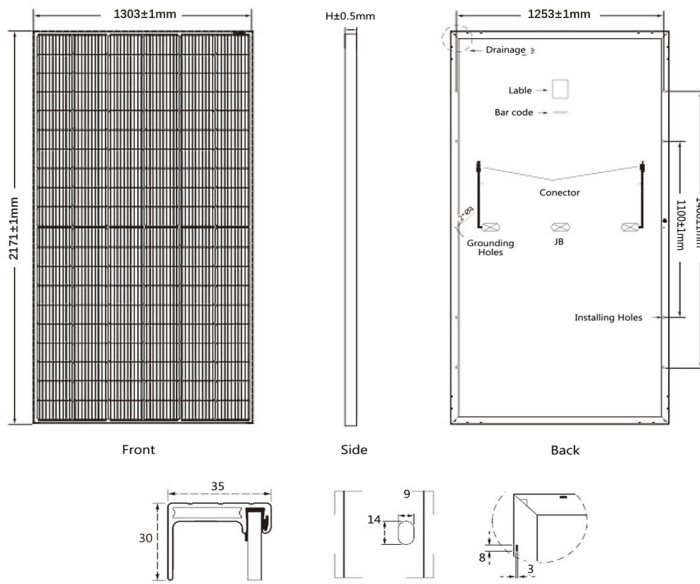


Special cell process ensures great  
performance under low irradiance conditions

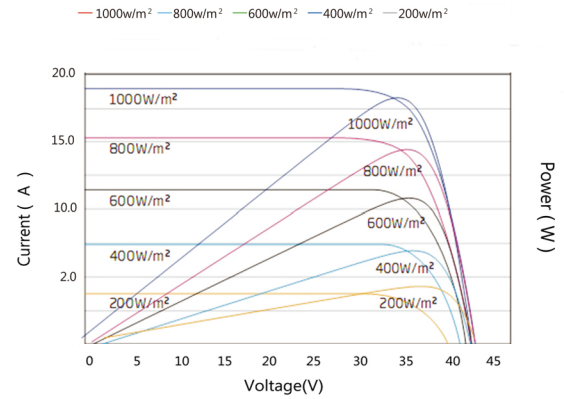
# XP-MH60H-590W-610W

## Monocrystalline Module

### DESIGN



### Current-Voltage & Power-Voltage Curves(610W)



### STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2171 x 1303 x 35 mm
Weight	31.0 kg
Number of cells	120 cells
Cell	PERC Monocrystalline 210 x 105mm
Glass	Tempered 3.2mm AR, High transmittance, Low iron
Frame	Anodized aluminium alloy
Junction box	IP68, 3 diodes
Output wire	4.0mm², wire length: 300mm
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

### PACKAGING CONFIGURATION

Container	40HQ
Quantity/pallet	31
Pallets/container	20
Quantity/container	620

### ELECTRIC CHARACTERISTICS

Model of modules	XP-MH60H-590W		XP-MH60H-600W		XP-MH60H-610W	
	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power – $P_{mp}$ (W)	590	445	600	453	610	461
Open-circuit voltage – $V_{oc}$ (V)	41.1	34.7	41.5	35.2	41.9	35.7
Short-circuit current – $I_{sc}$ (A)	18.42	16.16	18.52	16.23	18.62	16.30
Maximum power voltage – $V_{mp}$ (V)	32.9	28.7	33.3	29.1	33.7	29.5
Maximum power current – $I_{mp}$ (A)	17.94	15.51	18.02	15.57	18.10	15.63
Module efficiency – $\eta_m$ (%)	20.9%		21.2%		21.6%	
Module efficiency w/m²	208.6W		212.1W		215.6W	
Power tolerance (W)			(0, +5)			
Maximum system voltage (V)			1500V			
Maximum rated fuse current (A)			25A			
Current operating temperature (C)			-40°C ~ +85°C			

**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