



440W-460W PB SERIES

SINGLE GLASS - 182" CELL SIZE HIGH EFFICIENT PERC WITH 10BB

Outstanding Product Performance

- Competitive high-temperature performance with ameliorated temperature coefficient
- Minimized power loss in cell connection
- Better performance under shading effect
- Decreased nominal operating cell temperature to 45 ± 2°C
- Higher power generation with multi-busbar and half-cut technology

100.0% 98.0% 97.0% 97.0% -2.00% 1st-yearDegradation -0.55% 80.0% Annual Degradation 15-year Product Warranty Universal Solar Industry Standard 84.8% 84.8% 25-year Linear Performance Warranty

Trustworthy Quality And Reliability

- Guaranteed 0~+5W positive tolerance secures reliable power output
 - 5400Pa maximum snow load, 2400Pa maximum wind load
- Optimizedelectricaldesignlowershotspotriskandoperatingcurrent

PID Resistant

 Industry-leading cell processing technology and electrical design ensure solid PID resistance

MANAGEMENT SYSTEM CERTIFICATES

IEC 61215, IEC 61730

ISO 9001

2015 / Quality management system

ISO 14001

2015 / Standards for environmental management system

ISO 4500

2018 / International standards for occupational health & safety























Electrical Typical Values										
1000V	UNI440-P182SG-10B-120L UNI440-P182SG-10B-120H		UNI445-P182SG-10B-120L UNI445-P182SG-10B-120H		UNI450-P182SG-10B-120L UNI450-P182SG-10B-120H		UNI455-P182SG-10B-120L UNI455-P182SG-10B-120H		UNI460-P182SG-10B-120L UNI460-P182SG-10B-120H	
Model 1500V										
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated Power (Pmpp)	440	332	445	335	450	339	455	343	460	347
Rated Current (Impp)	12.97	10.46	13.06	10.54	13.15	10.61	13.24	10.68	13.33	10.75
Rated Voltage (Vmpp)	33.93	31.69	34.08	31.83	34.23	31.96	34.37	32.10	34.51	32.23
Short Circuit Current (Isc)	13.52	10.91	13.62	10.99	13.72	11.07	13.82	11.15	13.92	11.23
Open Circuit Voltage (Voc)	40.55	38.44	40.71	38.59	40.87	38.74	41.02	38.89	41.19	39.05
Module Efficiency (%)	20.33		20.56		20.79		21.02		21.25	
STC(Standard Testing Condition	2, AM 1.5, Cell	Temperature 2	5°C							

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

Mechanical Characteristics Cell Type Monocrystalline 182*91 Length: 1909mm (75.16 inch) Width: 1134mm (44.65 inch) Dimension (L × W × H) Height: 30mm (1.18 inch) 23.5kg (51.80 lbs) Weight 3.2mm toughened glass Glass Anodized Aluminium Alloy Frame 4mm² (IEC), Cable (Including (+): 450mm,(-): 250mm or Customized Length Connector) IP 68 Rated Junction Box

Temperature Ratings	
Voltage Temperature Coefficient	-0.26%/°C
Current Temperature Coefficient	+0.042%/°C
Power Temperature Coefficient	-0.33%/°C
Power Tolerance	0~+3%
NOCT	45±2°C

Absolute Maximum Rating			
Operating Temperature	From -40 to + 85°C		
Hail Diameter @ 80km/h	Up to 25mm		
Front Side Maximum Static Loading	5400Pa		
Rear Side Maximum Static Loading	2800Pa		
Maximum Series Fuse Rating	25A		
PV Module Classification	II		
Fire Rating (IEC61730)	С		
Maximum System Voltage	DC 1000V/1500V		

Packing Configuration						
Container	20' GP	40' HQ				
Pieces/Container	180	864				
Pcs/Pallet	36	36				
Pallets/Container	5	24				





