

## MONOFACIAL HALF CUT 10BB MODULE

### 525-560W

MonoPERC



#### More Power Generation

Larger size of light receiving area and higher module conversion efficiency



#### 10 Busbar Technology

Higher power collection density improves power generation



#### Stable Generation Performance

Guaranteed 0~+5W positive tolerance and slower power attenuation:  
first year  $\leq 2\%$ , 0.55% per year from 2-25



#### Higher Power Gains and Lower Losses

Excellent low irradiance performance and low shadow loss



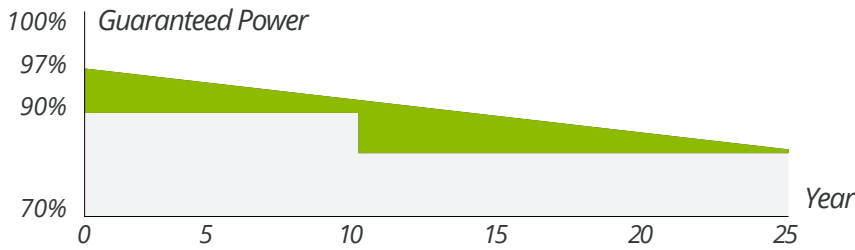
#### Process Optimized and Upgraded

Lower risk of hot spot and stronger anti-PID ability



#### Strong Environmental Adaptability and Great Durability

Certified by Dust-Sand, Salt-Mist, Ammonia etc. weather resistance tests and enhanced mechanical load: wind load (2400 Pascal) and snow load (5400 Pascal)



12 year product warranty

25 year linear performance warranty

Industry Standard

Smart Solar Technologies



**Tempered Solar Glass**  
Anti-Reflection Coating



**Backsheet Layer**  
320 / 350 Micron 3 Layers



**Junction Box**  
IP68 (Silicon Potting)



**Anodized Aluminium Frame**  
35mm Frame  
15-20  $\mu\text{m}$  Eloxal Surface Coating

## About Smart Solar Technologies

Smart Solar Technologies produces new generation PERC, Black Silicon, Bifacial, MBB and Half-Cut modules with backsheets or glass-glass options in its factory located in Gebze Organized Industrial Zone with a closed area of 23,500 m<sup>2</sup>.

[www.smartsolar.com.tr](http://www.smartsolar.com.tr) smartgunesteknolojileri /

**STC - ELECTRICAL VALUES**

Model	SS525M6H-24/TH	SS530M6H-24/TH	SS535M6H-24/TH	SS540M6H-24/TH	SS545M6H-24/TH	SS550M6H-24/TH	SS555M6H-24/TH	SS560M6H-24/TH
Type	Monocrystalline 182 x 91mm							
Rated Power (P <sub>mpp</sub> )	525	530	535	540	545	550	555	560
Tolerance	0~+5W							
Rated Current (I <sub>mpp</sub> )	12.68	12.74	12.80	12.86	12.91	12.97	13.03	13.08
Rated Voltage (V <sub>mpp</sub> )	41.40	41.60	41.80	42.00	42.20	42.40	42.60	42.80
Short Circuit Current (I <sub>sc</sub> )	13.48	13.54	13.60	13.66	13.72	13.78	13.84	13.90
Open Circuit Voltage (V <sub>oc</sub> )	49.20	49.40	49.60	49.80	50.00	50.20	50.40	50.60
Module Efficiency (%)	20.31	20.51	20.70	20.89	21.09	21.28	21.48	21.67
NOCT (Nominal Operating Cell Temperature)	45±2°C							
Voltage Temperature Coefficient	-0.31%/°C							
Current Temperature Coefficient	+0.05%/°C							
Power Temperature Coefficient	-0.35%/°C							

*Standard Test Environment : Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, Spectrum AM1.5*

**NOCT - ELECTRICAL VALUES**

Rated Power (P <sub>mpp</sub> )	391	394	398	402	405	409	413	417
Rated Current (I <sub>mpp</sub> )	10.06	10.11	10.15	10.20	10.24	10.24	10.33	10.38
Rated Voltage (V <sub>mpp</sub> )	38.80	39.00	39.20	39.40	39.60	39.80	40.00	40.10
Short Circuit Current (I <sub>sc</sub> )	10.89	10.94	10.99	11.04	11.09	11.13	11.18	11.23
Open Circuit Voltage (V <sub>oc</sub> )	46.10	46.30	46.50	46.70	46.90	47.10	47.30	47.50

*Standard Test Environment : Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s*

**MECHANICAL CHARACTERISTICS**

Dimension (LxWxH)	Length: 2279mm (89,72 inch) Width: 1134mm (44,65 inch) Height: 35mm (1,38 inch)
Weight	29kg (63,93 lbs)
Glass	3.2mm High Transmission, Antireflection Coating
Cable	4mm <sup>2</sup> (IEC), 300/400mm in length, length can be customized
Junction Box	IP 68, 3 Bypass Diodes
Connector	MC4 Compatible

**ABSOLUTE MAXIMUM RATING**

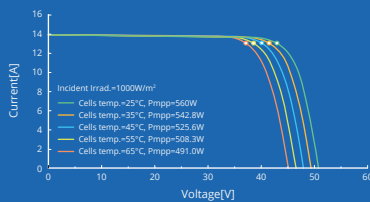
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Maximum Series Fuse Rating	25A
Application level	Class A
Maximum System Voltage	DC 1500V

**PACKING CONFIGURATION**

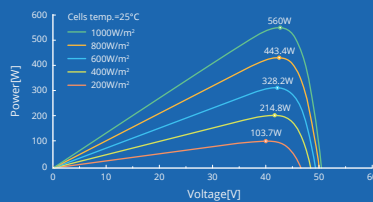
Container	40HQ
Pieces/Container	620

**ELECTRICAL CHARACTERISTICS**

Current-Voltage Curve



Power-Voltage Curve



Current-Voltage Curve

