



Technology

High module conversion efficiency through superior manufacturing technology



Voltage resistance

Module can withstand the 1500V system voltage



PID Free

Excellent PID resistance according to IEC TS 62804-1



Performance

High performance under low light conditions (cloudy days, mornings and evenings)



Quality

Manufactured according to International Quality and Environmental Management



Value

Our vertically integrated business model allows for competitive pricing and great value



Power output

- Our IP68 rated junction box improves module performance and stability
- High-performance connectors provide low resistance interconnection to ensure the full utilization of module output power
- Smart greenhouse cabling dc



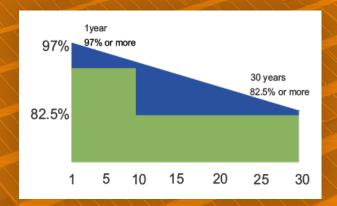
Superior Manufacturing Quality Assurance

- All modules are manufactured using TQC & SPC quality control systems
- Advanced cell sorting to avoid electric mismatch
- 100% EL Test-before lamination & prior to shipment
- Comprehensive Safety and Reliability tests are performed



Visible Quality

- Durable, high quality
- Rigid construction: 2400PA & 2400PA rated assembly
- Dirt protection



Warranty

- 15 Years Manufacturers Warranty
- **Linear Power Output Warranty**
- No less than 82,5% at year 30th









Electrical Specifications

* STC Irradiance of 1000W/M 2 Spectrum AM 1.5 and cell temperature of 25 $^{\circ}$

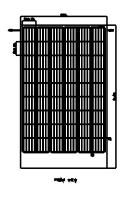
Module Type	HTS280M-54GB	HTS285M-54GB		HTS290M-54GB	HTS295M-54GB
Output tolerance			0/+3%		
Bifaciality Factor			70% 5%		
Maximum Rating Power (PM)	280W	285W		290W	295W
Module Efficiency	17.05%	17.35%		17.66%	17.96W
Open Circuit Voltage (Voc)	35.56V	35.76V		35.96V	36.16V
Maximum Power Voltage (VMP)	29.77V	29.97V		30.17V	30.37V
Short Circuit Current (ISC)	9.82A	9.92A		10.02A	10.11A
Maximum Power Current (IMP)	9.42A	9.52A		9.62A	9.72A

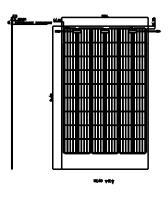
Bifacial Gain

10%	РМ	308W	313.5W	319W	324.5W
20%	РМ	336W	342W	348W	354W
30%	PM	364W	370.5W	377W	383.5W

Mechanical Gain

Cell Type	Mono 158.75*158.75
Cell Arrangement	54 (6x9)
Module structure	Glass / POE / Glass
Glass thickness	1.6mm / 1.6mm (front/back)
Application Class	Class A at IEC 61730
Junction Box Rating	IP 68
Cables (positive/Negative)	270mm / 205mm / 4mm²
Connector Type	MC4 / MC4 Compatible
Fire Rating Class	Class A





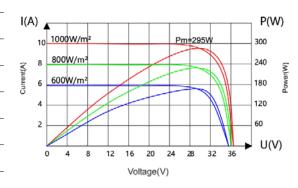
Maximum Ratings

Operating Temperature	-40°C WR +85°C
Maximum Load capacity	Snow 2400Pa / Wind 2400Pa
Maximum system Voltage	1000V / 1500V DC(IEC)
Maximum series fuse rating	1.6mm / 1.6mm (front/back)
Number of diodes	3

Packaging

Modulde Dimensions	1649x996x4.2mm
Weight	15.7 Kg
Pallet Dimensions	1775x1140x1170mm
Container	40' HQ
Pieces per pallet	33
Pallets per container	26
Pieces per container	858
Gross Weight per Pallet	600 Kg
Gross Weight per Container	15600 Kg

Current-Voltage&Power-Voltage Curve(295W)



Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42°C ± 3°C
Temperature Coefficient of Isc	+0.038%/°C
Temperature Coefficient of Voc	-0.270%/°C
Temperature Coefficient of Pmax	-0.365%/°C

Temperature Dependence of Isc,Voc,Pmax(°C)

