





## SOLAR MODULES



### Features & Performance

Our PV modules have been certified by the TUV, CE, CSA; SKY ENERGY is certified by ISO9001, ISO14001, OHSAS18001 etc. As a leading PV manufacturer in Indonesia, our prioritized goal is to keep developing and producing high quality and high efficiency modules.


-  **Maximum Power: 165Wp**
-  **Module Efficiency: 16.64 %**
-  **Product Warranty: 10 years**
-  **Power Warranty: 10 years  $\geq 90\%$   
25 years  $\geq 80\%$**

**ST36m165/160/155**  
**ST36M150/145/140**


#### Mechanical Property

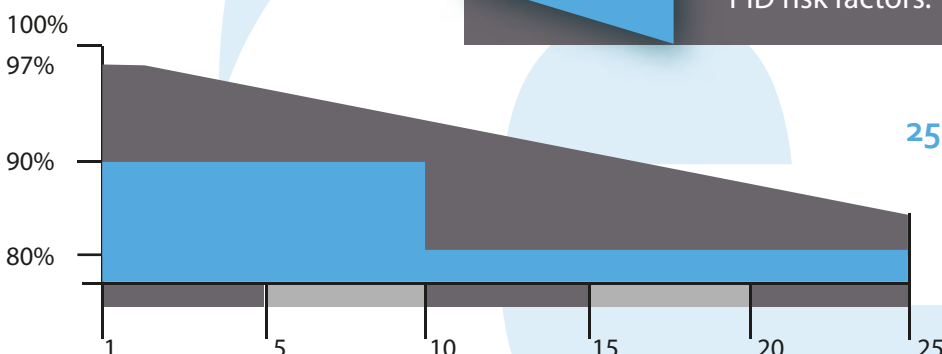
-  Snow loads up to 5400Pa
-  Wind loads up to 2400Pa

#### Low Light Performance

-  Excellent performance under low light (morning, evening and cloudy days)

#### High Durability

-  Durable PV modules, independently tested for harsh environmental conditions, such as exposure to salt mist, ammonia and known PID risk factors.



**25 Years Linear Warranty**



## Electrical Performance (STC : AM 1.5, 1000W/m<sup>2</sup>, 25°C)

Module Type	ST36M165	ST36M160	ST36M155	ST36M150	ST36M145	ST36M140
Maximum Power (Pmax / W)	165	160	155	150	145	140
Power Tolerance	0 ~ +3%					
Maximum Power Voltage (Vm / V)	18.9	18.7	18.6	18.4	18.3	18.0
Maximum Power Current (Im / A)	8.72	8.56	8.35	8.19	7.96	7.79
Open Circuit Voltage (Voc / V)	22.9	22.7	22.6	22.4	22.2	22.1
Short Circuit Current (Isc / A)	9.23	9.11	8.87	8.82	8.74	8.64
Module Efficiency (%)	16.64	16.14	15.63	15.13	14.62	14.12

## Electrical Performance (NOCT : wind speed 1m/s, 800W/m<sup>2</sup>, 20°C)

Module Type	ST36M165	ST36M160	ST36M155	ST36M150	ST36M145	ST36M140
Maximum Power (Pmax / W)	120	117	113	110	106	102
Maximum Power Voltage (Vm / V)	17.2	17.0	16.9	16.7	16.6	16.4
Maximum Power Current (Im / A)	6.99	6.86	6.69	6.57	6.38	6.25
Open Circuit Voltage (Voc / V)	21.0	20.9	20.8	20.6	20.4	20.3
Short Circuit Current (Isc / A)	7.46	7.36	7.17	7.13	7.06	6.98

## Mechanical Properties

Dimensions (LxWxH / mm)	1480x670x35
Weight (Kgs)	11.8
Solar Cells	Monocrystalline 156x156mm
No. of Cells	36(4x9)
Glass	3.2mm low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP 65 above, 2 bypass diodes
Cables	4mm <sup>2</sup> , length 900mm
Connectors	IP67, MC4 compatible

## Operation Conditions

Maximum System Voltage (VDC)	1000 (IEC) / 600 (UL)
Maximum Series Fuse Rating (A)	15
Operating Module Temperature (°C)	-40 to +85

## Temperature Properties

Normal Operating Cell Temperature	45±2 °C
Temperature Coefficient of Pm	-0.38 %/°C
Temperature Coefficient of Voc	-0.356 %/°C
Temperature Coefficient of Isc	+0.056 %/°C

## System Design

Hail safety impact velocity	D 25mm at 23mm/s
Static Load (Front/Back)	5400Pa/2400Pa
Application class	Class A
Fire safety class (IEC61729)	Class C

## Packing Configuration

Container Sizes	20GP	40HC
Pieces per pallet	84	56/33
Pallets per Container	7	15+15
Total pieces	588	1335

