

what we offer

**YOUR  
BEST  
PV  
SUPPLIER**

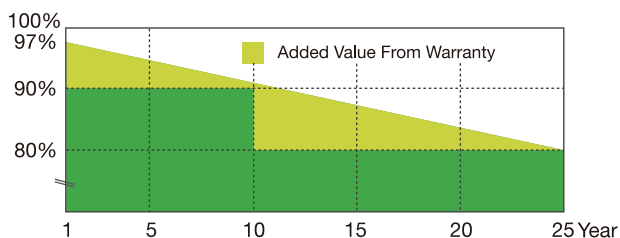
## **BSM500M-96** **Monocrystalline 96 cells 440w-500w**

### **1** *Reliable Quality*







- Positive power tolerance: 0~+5W
- 100% EL double-inspection ensures modules are defects free
- Modules binned by current to improve system performance
- Potential Induced Degradation (PID) Resistant

### **2** *Superior Warranty*

- 10-year product warranty
- 25-year linear power output warranty



### **3** *Key features*

-  Monocrystalline modules designed for commercial and solar farm grid-tied applications
-  High power output and highest conversion efficiency
-  Anti-reflective and anti-soiling surface reduces power loss from dirt and dust
-  Outstanding performance in low-light irradiance environments
-  Excellent mechanical load resistance: Certified to withstand high wind loads (2400Pa) and snow loads (5400Pa)
-  High salt and ammonia resistance certified by TÜV NORD

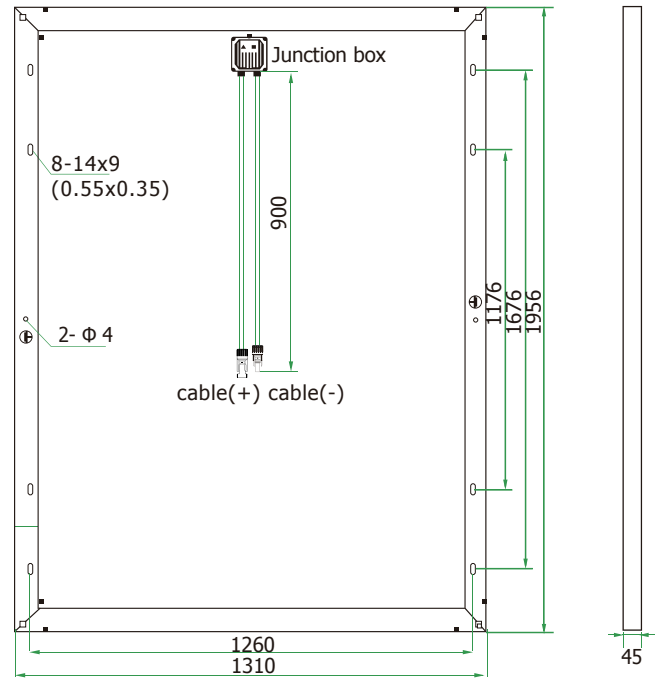
## Mechanical Parameters

Cell (mm)	Mono 156x156
Weight (kg)	26 (approx)
Glass Thickness	3.2mm
Dimensions (LxWxH) (mm)	1956x1310x45
Cable Cross Section Size (mm <sup>2</sup> )	4
No. of Cells and Connections	96(8x12)
Junction Box	IP67
Connector	MC4 Compatible
Packaging Configuration	23 Per Pallet

## Working Conditions

Maximum System Voltage	DC 1000V (IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	15A
Maximum Static Load, Front (e.g., snow and wind)	5400Pa (112 lb/ft <sup>2</sup> )
Maximum Static Load, Back (e.g., wind)	2400Pa (50 lb/ft <sup>2</sup> )
NOCT	45±2°C
Application Class	Class A

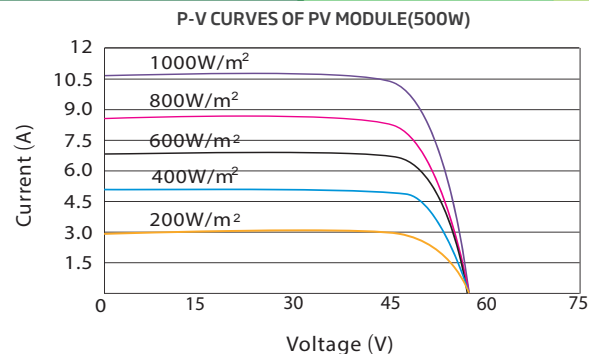
## Engineering Drawings



## Electrical Parameters

Module	BSM440M-96	BSM450M-96	BSM460M-96	BSM470M-96	BSM480M-96	BSM490M-96	BSM500M-96
Peak Power Watts-P <sub>MAX</sub> (Wp)*	440	450	460	470	480	490	500
Power Output Tolerance-P <sub>MAX</sub> (W)				0 ~ +5			
Maximum Power Voltage-V <sub>MPP</sub> (V)	47.78	47.87	48.01	48.25	48.35	48.45	48.63
Maximum Power Current-I <sub>MPP</sub> (A)	9.21	9.40	9.59	9.74	9.93	10.12	10.28
Open Circuit Voltage-V <sub>OC</sub> (V)	58.50	58.57	58.75	58.82	58.89	58.95	59.01
Short Circuit Current-I <sub>SC</sub> (A)	9.40	9.73	9.78	9.90	10.04	10.67	10.87
Module Efficiency η <sub>m</sub> (%)	17.17	17.56	17.95	18.34	18.73	19.12	19.51
Temperature Coefficient of I <sub>sc</sub> (α <sub>Isc</sub> )				+0.058%/°C			
Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )				-0.330%/°C			
Temperature Coefficient of P <sub>max</sub> (γ <sub>Pmp</sub> )				-0.410%/°C			
STC	Irradiance 1000W/m <sup>2</sup> , Cell Temperature 25°C, Air Mass 1.5						

## I-V Curve



CONFORMS TO  
UL STD.1703  
CERTIFIED TO  
ULC/ORD STD.  
C1703