

TracksunSolar,
For Our Future!

SUPER QUALITY
HIGH EFFICIENCY
STRONG POWER

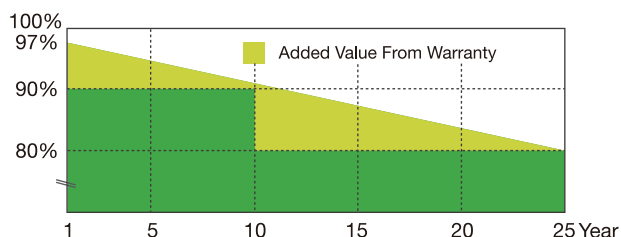
TS-500M-96 Monocrystalline 96 cells 440w-500w

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 SUD



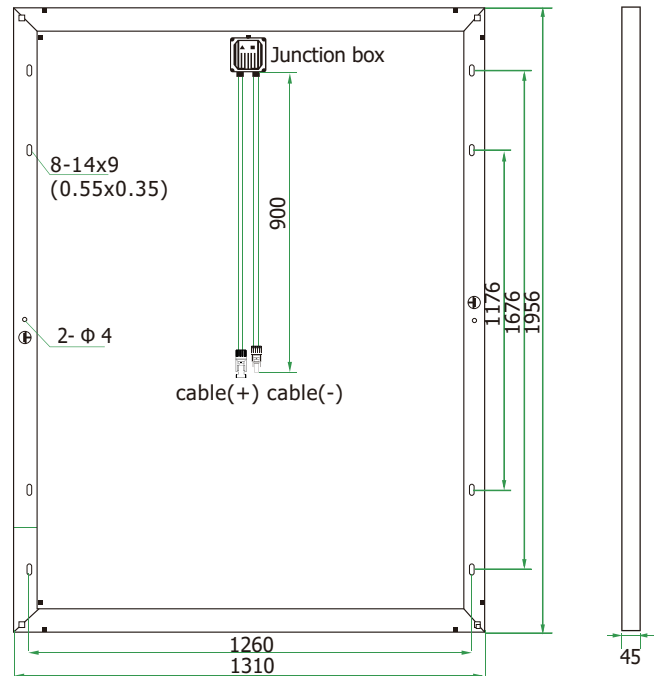
Mechanical Parameters

Cell (mm)	Mono 156x156
Weight (kg)	26 (approx)
Glass Thickness	3.2mm
Dimensions (LxWxH) (mm)	1956x1310x45
Cable Cross Section Size (mm ²)	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/1500V (IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
Maximum Static Load, Front (e.g., snow and wind) Maximum Static Load, Back (e.g., wind)	5400Pa (112 lb/ft ²) 2400Pa (50 lb/ft ²)
NOCT	45±2°C
Application Class	Class A

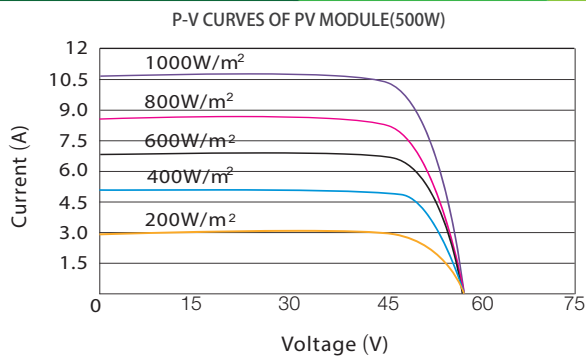
Engineering Drawings



Electrical Parameters

Module	TS440M-96	TS-450M-96	TS-460M-96	TS-470M-96	TS-480M-96	TS-490M-96	TS-500M-96
Peak Power Watts-P _{MAX} (Wp)*	440	450	460	470	480	490	500
Power Output Tolerance-P _{MAX} (W)	0 ~ +5						
Maximum Power Voltage-V _{MPP} (V)	47.78	47.87	48.01	48.25	48.35	48.45	48.63
Maximum Power Current-I _{MPP} (A)	9.21	9.40	9.59	9.74	9.93	10.12	10.28
Open Circuit Voltage-V _{OC} (V)	58.50	58.57	58.75	58.82	58.89	58.95	59.01
Short Circuit Current-I _{SC} (A)	9.40	9.73	9.78	9.90	10.04	10.67	10.87
Module Efficiency η _m (%)	17.17	17.56	17.95	18.34	18.73	19.12	19.51
Temperature Coefficient of I _{sc} (αI _{sc})	+0.058%/°C						
Temperature Coefficient of V _{oc} (βV _{oc})	-0.330%/°C						
Temperature Coefficient of P _{max} (γP _{mp})	-0.410%/°C						
STC	Irradiance 1000W/m ² , Cell Temperature 25°C, Air Mass 1.5						

I-V Curve



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

