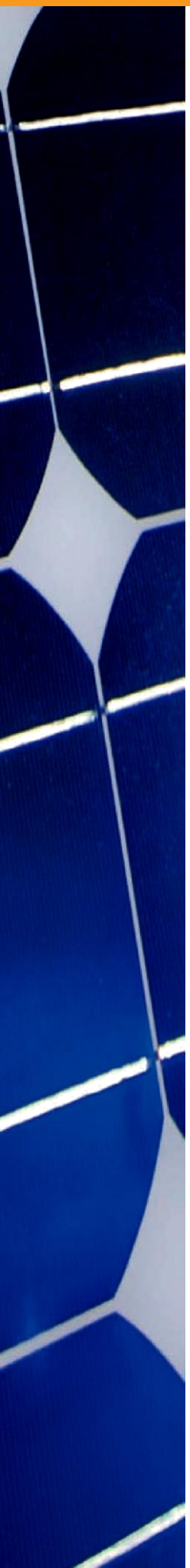
MODEL: GS-S-390-TS

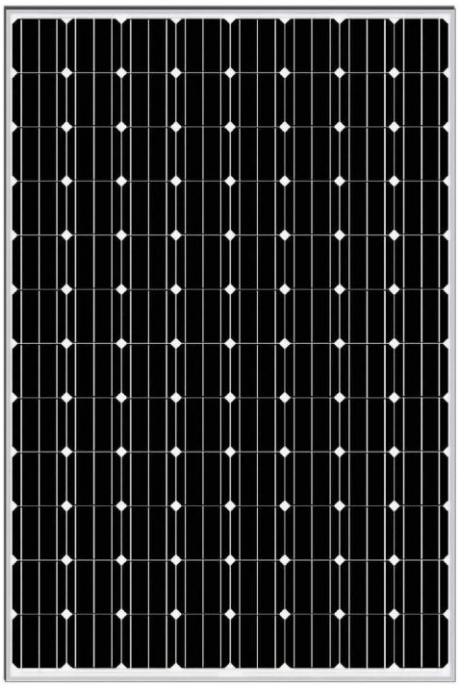


Grape Solar™
Clean Power. Today.

High Efficiency Mono-crystalline
Photovoltaic Module

UL LISTED

Overview



- High efficiency solar cells (approx. 18%) with quality silicon material for high module conversion efficiency and long term output stability and reliability.
- Rigorous quality control to meet the highest international standards.
- High transmittance, low iron tempered glass with enhanced stiffness and impact resistance.
- Unique frame design with strong mechanical strength for greater than 30 lbs/ft^2 wind load and snow load withstanding and easy installation.
- Advanced encapsulation material with multilayer sheet lamination to provide long-life and enhanced cell performance.
- Outstanding electrical performance under high temperature and weak light environments.

Applications

- Any large or small on-grid /off-grid solar power stations.
- Commercial/industrial building roof-top and ground systems.
- Residential roof-top and ground systems.

Warranty

- 10 year limited product warranty on materials and workmanship.
- 25 year warranty on >80% power output and 10 year warranty on >90% power output.
- Refer to warranty document for detailed warranty information.

Certifications

- UL-1703 ISO 9000:2000
- CE TUV IEC61215 IEC61730

TÜV IEC ISO CE

Mechanical Specifications

Characteristic	Details
Cell Size	156mm x 156mm (6.14” x 6.14”)
Module Dimension (L x W x T)	1960mm x 1308mm x 40mm (77.2” x 51.5” x 1.57”)
No. of Cells	8 x 12 = 96
Weight	35.5 kg (78.2 lbs)
Cable Length	1100mm (43.3”) for positive (+) and negative (-)
Type of Connector	MC-IV
Junction Box	IP65 Rated
No. of Holes in Frame	6 installation holes, 2 grounding holes, 8 drainage holes.

MODEL: GS-S-390-TS

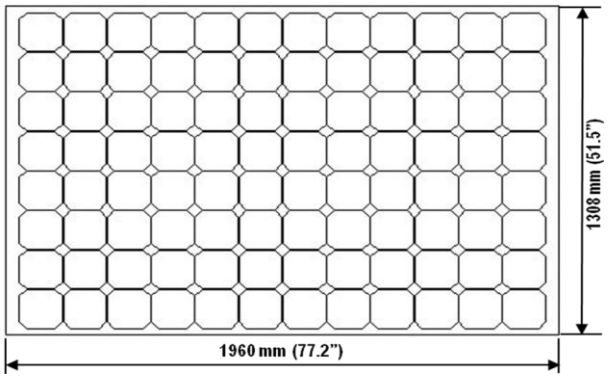
Electrical Specifications

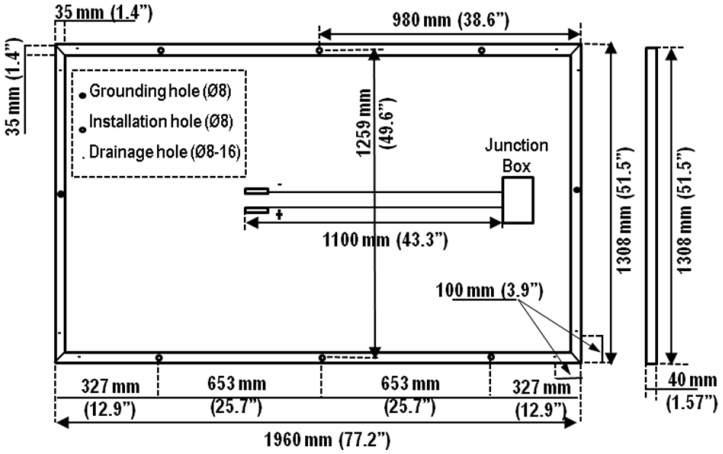
(STC* = 25 ºC, 1000W/m^2 Irradiance and AM=1.5)

Model	GS-S-390-TS
Max. System Voltage (IEC/UL)	1000V / 600V
Maximum Power P_{max}	390 W (-2%, +2%)
CEC Listed PTC Power	341 W
Voltage at Maximum Power Point V_{mpp}	49.4 V
Current at Maximum Power Point I_{mpp}	7.92 A
Open Circuit Voltage V_{oc}	59.6 V
Short Circuit Current I_{sc}	8.42 A
Module Efficiency (%)	15.2%
Temperature Coefficient of V_{oc}	-0.238 V/ºC (-0.40% /ºC)
Temperature Coefficient of I_{sc}	4.2x10^{-3} A/ºC (0.05% /ºC)
Temperature Coefficient of P_{max}	-1.95 W/ºC (-0.50% /ºC)

*Standard Test Conditions

Physical Specifications mm (inch)

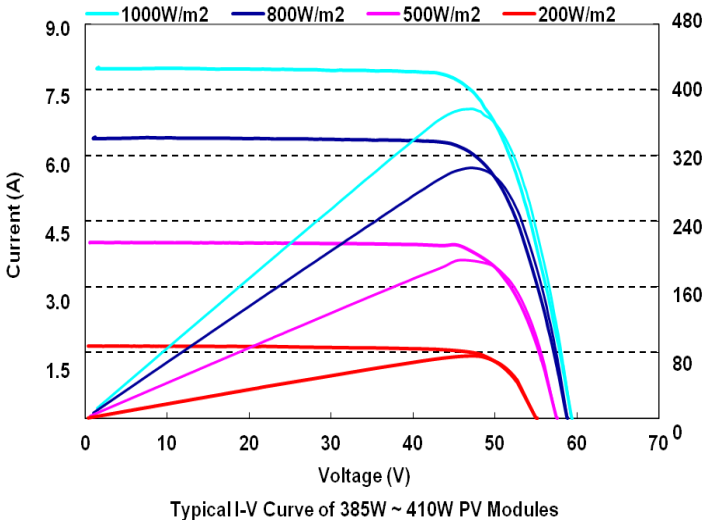




Other Performance Data

Power Tolerance	Operating Temperature	Max Series Fuse Rating	NOCT*
-2%, + 2%	-40 ºC to +90 ºC	15 A	47 ºC ± 2 ºC

*Normal Operating Cell Temperature



Typical I-V Curve of 385W ~ 410W PV Modules

Grape Solar™

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