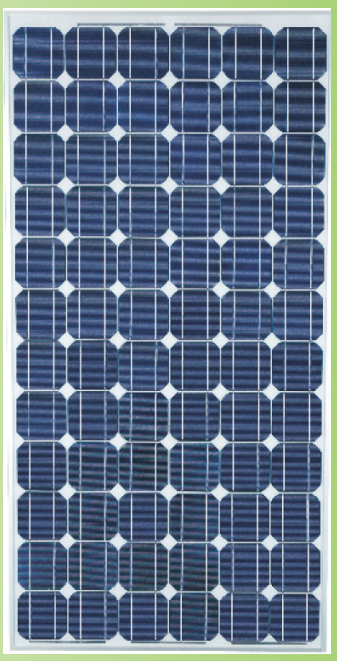
e·VILLAGE®

CS5A-180



KEY FEATURES

- **72 High-Efficiency Solar Cells**
- **Special Aluminum Frame Design** - The specially treated frame aluminum substantially increases module endurance against high winds and snow load. Special mounting holes on the module frames for vertical and/or horizontal mounting.
- **Reinforced Solar Glass** - The high-transparency low-iron tempered glass allows maximum light permeability while enhancing stiffness and impact resistance.
- **Advanced Cell Encapsulation** - The interconnected cells are embedded in ultra transparent EVA with multilayer backsheets for additional weather protection. Tests carried out in accordance with IEC 61215 confirm that the module can withstand heavy snow loads, ice accumulation and hail per industry standard.
- **Junction Box** - contains bypass diode to minimize the power loss due to shading and reduces the risk of permanent failure due to localized heating (Hot-Spot-effect).
- **Optimized Module Surface Area** - The distance between the frame edge and the cell circuitry is calculated according to the electrical output optimization.

CS5A-180

CS5A is a robust all-purpose solar module that can be used for on-grid solar power station as well as for roof-top solar systems on residential, commercial, and industrial buildings.

The solar cells have high efficiency and stable performance in photovoltaic conversion. The cells are produced through advanced PECVD film forming and provides a dark blue silicon nitride anti-reflection film of homogenous color and attractive appearance.

APPLICATIONS

- Commercial, industrial, and government building roof-top systems
- Rural electrification
- Large on-grid solar power stations
- Other industrial and commercial applications

LIMITED WARRANTY

- 25 years limited warranty on power output

90% power output assurance for 10 years, and 80% power output assurance for 25 years. Please refer to warranty statement for warranty conditions in detail.

CERTIFICATIONS

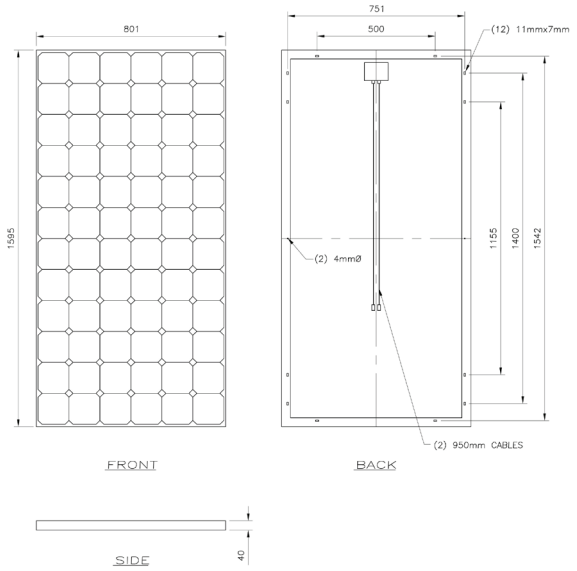
Module Certificates

- IEC 61215, TUV Safety Class II, UL 1703, CE

Factory Certificates

- ISO 9001:2000
- ISO/TS 16949:2002, QC 080000

MECHANICAL SPECIFICATIONS



Dimensions		
Length*Width*Depth	mm	1595 x 801 x 40
	(in)	(62.8 x 31.5 x 1.57)
Weight	kg (lbs)	15.5 (34.2)

Cells	
Cell Material	Mono or Poly
Number of Cells	72

ELECTRICAL CHARACTERISTICS

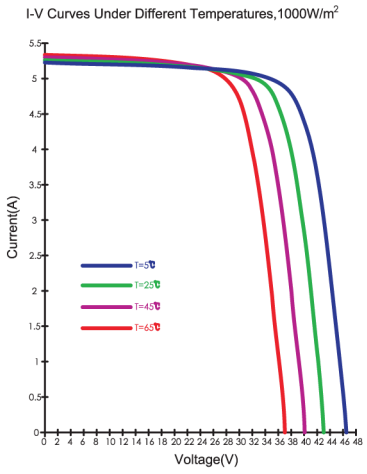
Electrical Performance

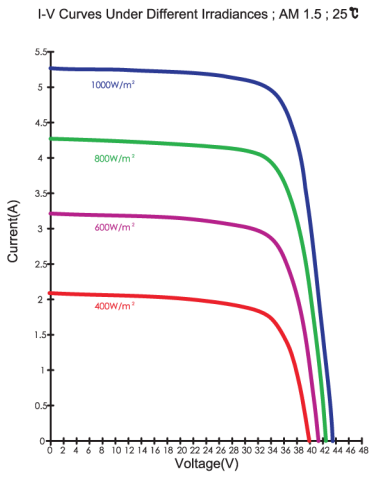
Under Standard Test Conditions (STC) of irradiance of 1000W/m², spectrum AM 1.5 and cell temperature of 25°C

		CS5A-180
Maximum Power	Pmax	180W
Voltage at Maximum Power	Vmp	36.1V
Current at Maximum Power	Imp	4.99A
Open Circuit Voltage	Voc	44.5V
Short Circuit Current	Isc	5.40A
Maximum System Voltage		1,000V(IEC)/600V(UL)
Temperature Coefficient	Voltage (Voc)	-0.35 %/°C
	Current (Isc)	0.060 %/°C

*NOCT (Normal Operating Cell Temperature): 45°C

**Module power tolerance: ±5W (approx. ±3%)





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AUTHORIZED DEALER

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