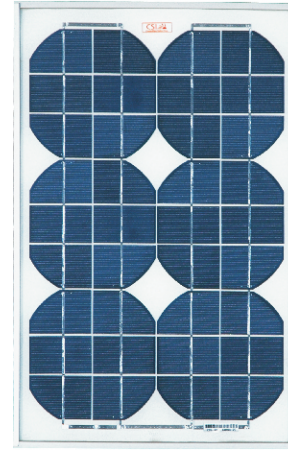


CSI Canadian Solar Inc.

CS5F-12

CS5F is designed for powering small commercial applications and consumer products.

CSI's meticulous design and production techniques ensure a high-yield, long-term performance for every module produced. Our rigorous quality control and in-house testing facilities ensure CSI modules meet the highest quality standards possible.



KEY FEATURES

- **36 High-Efficiency Solar Cells**
- **Special Aluminum Frame Design** - The specially treated frame aluminum substantially increases module endurance against high winds and snow load.
- **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.
- **Optimized Module Surface Area** - The distance between the frame edge and the cell circuitry is calculated according to the electrical output optimization.

APPLICATIONS

- Power source for remote telecommunication equipment
- Monitoring systems for the oil & gas industry
- Traffic, security, environment, and other remote information monitoring systems
- Water pumping systems
- Rural electrification
- Small home power systems
- 12V or 24V battery charging system
- Other industrial and consumer applications

CERTIFICATIONS

Module Certificates

- CE

Factory Certificates

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

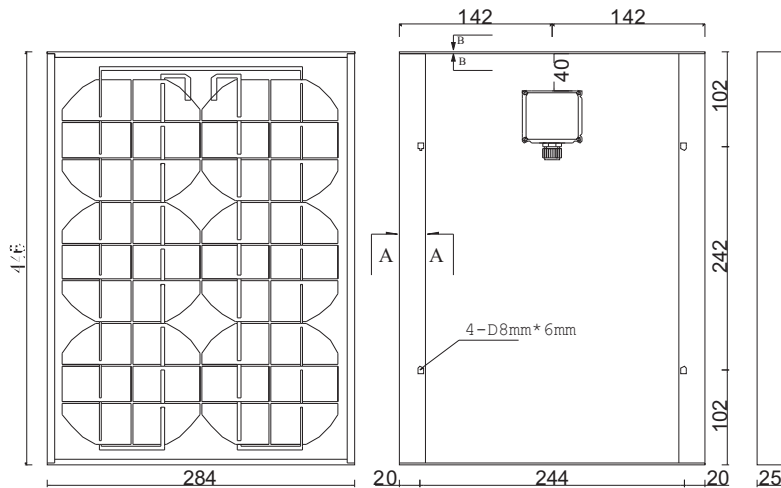


WARRANTY

- Warranty terms upon request

CS5F-12

Mechanical Specifications



Dimensions

Length*Width*Depth	mm	446 x 284 x 25
	(in)	(17.6 x 11.2 x 1.0)
Weight	kg (lbs)	1.6 (3.5)

Cells

Cell Material	Mono or Polycrystalline
Number of Cells	36

Electrical Characteristics

Electrical Performance

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

		CS5F-12
Maximum Power	Pmax	12W
Voltage at Maximum Power	Vmp	17.3V
Current at Maximum Power	Imp	0.69A
Open Circuit Voltage	Voc	21.5V
Short Circuit Current	Isc	0.78A
Maximum System Voltage		1000V(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: ±1W (approx. ±10%)

*Specifications included in this datasheet are subject to change without prior notice.



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