

ATLAS MINI DC SOLAR HOME SYSTEM

**MODEL: CSFDC-10-1207B1
CSFDC-20-1212B1**

1.0 USER PRECAUTIONS

To ensure that you use the system correctly and safely, please read the following warnings carefully.



Do not place the main unit in rainy, humid or similar conditions.



Do not expose the system to explosive or flammable conditions.



Do not disassemble the main system unit; this could cause partial system failure or damage the system.

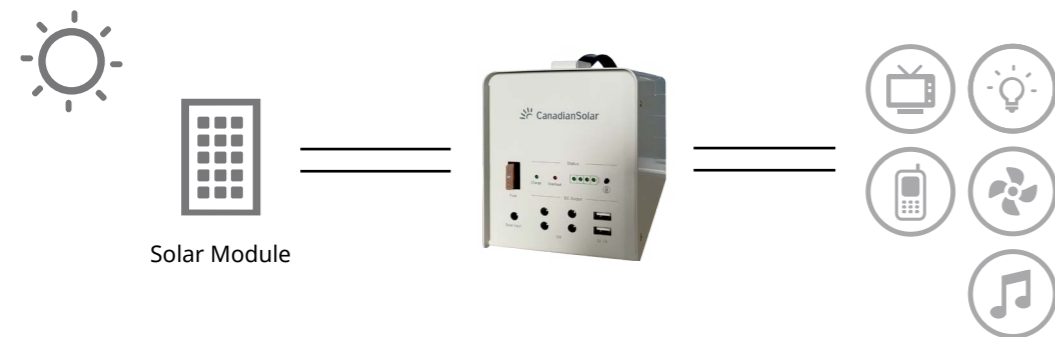
- This is a DC system. Using non-original power for charging purposes is not allowed.
- Keep the system clean and well ventilated.
- Do not cover or jam the main unit in any way.
- Consistently overcast and rainy weather will result in an insufficient amount of system power. In this case, please reduce the load or reduce the electricity load time.

Please contact your retailer for advice on using non-original electrical devices.

- The battery must be fully charged before using the Atlas mini for the first time. Remove the fuse if the solar module has been disconnected from the main unit for more than 1 month. Otherwise, the amount of electric energy will decrease, and the Atlas mini may not work properly.
- The system output will automatically shut down when the battery is overdischarge.

2.0 INTRODUCTION

Atlas mini Solar Home System (SHS) is an off-grid solar system. The system consists of solar module, controller, battery and LED lamps. It transforms sunlight into DC electricity and stores energy into the battery. The battery can be used for LED lamps or other small DC devices. The system is designed for rural areas where no grid exists and can also be adapted to emergency, camping, RV and other outdoor activities.



3.0 SYSTEM COMPONENTS



4.0 INTERFACE INTRODUCTION



1. Charge Indicator
Lighting: Battery is charging.
2. Overload Warning
Flashing: Overload or short circuit of the load.
3. Battery Capacity Display
Each LED light means 25% available capacity.
The first LED flash on the left means the system is in low voltage protection. There is no power output.
4. Capacity Check Button
Short press to check the capacity of battery.
5. PV Input Socket
6. 12 V DC Socket
7. USB Socket
8. Fuse

5.0 INSTALLATION AND OPERATION

<p>Step 1 Install fuse: For initial use, install the fuse first</p>	<p>Step 2 Charging: Connect the PV cable to the PV socket</p>	<p>Step 3 Check battery capacity: Press the button to check the capacity of battery</p>
<p>Step 4 Lighting: Connect the lamps to the main unit and turn on the switch on the lamp cable</p>		<p>Step 5 Power the USB devices Connect the USB cable to the USB socket</p>

6.0 SPECIFICATIONS

System Type	CSFDC-10-1207B1	CSFDC-20-1212B1
Solar Module		
Power	10 Wp	20 Wp
Type	Crystalline Silicon	Crystalline Silicon
Imp	0.56 A	1.11 A
Vmp	18 V	18 V
Voc	21 V	21 V
Isc	0.61 A	1.21 A
Battery		
Type	AGM, Lead-acid Battery	AGM, Lead-acid Battery
Voltage	12 V _{DC}	12 V _{DC}
Capacity	7 Ah@C20	12 Ah@C20
Controller		
Max. Charge Current	3 A (+10%)	3 A (+10%)
12 V USB Output Ports	Four, Total current 2.5 A(+10%)	Four, Total current 2.5 A(+10%)
5 V USB Output Ports	Two, Total current 2 A(+10%)	Two, Total current 2 A(+10%)
Over Charge Voltage	14.2 V _{DC}	14.2 V _{DC}
Over Charge Reconnect Voltage	13.5 V _{DC}	13.5 V _{DC}
Over Discharge Voltage	11.2 V _{DC}	11.2 V _{DC}
Over Discharge Recover Voltage	12 V _{DC}	12 V _{DC}
Battery Overdischarge Protection	Yes	Yes
PV Reverse Polarity Protection	Yes	Yes
Battery Reverse Polarity Protection	Yes	Yes
Reverse Discharge from Battery to PV	Yes	Yes
Output Overload Protection	Yes	Yes
Output Short-circuit Protection	Yes	Yes
Display		
System Status Indicator	LED	LED
Battery Capacity Status Display	LED	LED
General Data		
System Dimensions (L x W x H)	346 x 276 x 204 mm	346 x 276 x 204 mm
System Net Weight	4.7 kg	7.3 kg
DC Output Sockets	12 V: DC socket Φ 55/25 5 V: USB-A	12 V: DC socket Φ 55/25 5 V: USB-A
AC Output Sockets	220 V: 2 piece	220 V: 2 piece
LED Lamp	2 pieces, 12 V, 3 W, E27, 240 lumen, 5800–6500 K	2 pieces, 12 V, 3 W, E27, 240 lumen, 5800–6500 K
Operating Temperature Range	0°C-- 45°C	0°C-- 45°C
Humidity	0–85%	0–85%
Operature Altitude	< 1000 m	< 1000 m
Fuse	5 A	5 A
Degree of Protection (IP code)	IP 20	IP 20
Housing	Metal	Metal

7.0 WARRANTIES

- The system comes with a one-year limited warranty. The PV modules come with a ten-year warranty for 90% of the minimum rated power output. The warranty shall be effective from the date of installation or 90 (ninety) days after delivery by Canadian Solar, whichever comes first.
- The limited warranties do not cover normal wear and tear, misuse or damage as a result of abusing, altering, improperly installing or using the system, unauthorized servicing, modifying, storing, or transporting of the system, or damage caused by power failures, natural disasters or other events that lie beyond Canadian Solar's control.

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