



Flexible Shingled Solar Panel

USER MANUAL



MODEL NO.: AP110SG-FLEX / AP200SG-FLEX

V1.1

ABOUT US

ATEM POWER, born in June 2017, as a synonym for exciting outdoor experience, is an Australian company with dedication and passion for the R&D of high quality products in the field of renewable energy products, batteries and related accessories.

Since the company was founded, we have committed to innovation that aims to make your life infinitely more convenient. And the belief in our conviction for quality and commitment allows us to innovate in developing products that are optimally tailored to the needs of our amazing customers.

We engineer and supply solar products for homes, 4x4s, recreational vehicles and virtually any application you can think of. And we also develop reliable, high performing deep-cycled batteries and lithium batteries for standby or daily power needs. Accessories include battery chargers and inverters that are ideal for RV's, commercial vehicles, boats, yachts and many more applications!

At ATEM POWER, we stay true to our DNA by prioritizing technological innovation designed to improve our products and striving to provide excellent customer care. Because we are motivated to explore the limits of solar power!

WARNINGS & SAFETY INFORMATION

DO NOT operate monocrystalline solar panels UNLESS YOU HAVE READ AND UNDERSTOOD THIS MANUAL and the panel should be installed as per these installation instructions. ATEM POWER recommends that the panel be installed by a suitably qualified person.

- Please bear in mind that the solar panel should be kept away from liquids and chemical solvents.
- Never place your solar panel near fire or flammable materials.
- DO NOT immerse the solar panel in water or wet it.
- Any modifications to the product will void the warranty.
- You should never disassemble, bend, hit or step on your solar panel. Handle and install your solar panel with care, otherwise cells and wiring may be damaged, which can cause short circuit, local overheating and decrease in efficiency.
- Ensure nothing sharp or heavy could potentially break or damage the solar panel during transport or storage.
- DO NOT connect the solar panel directly to a battery.
- Never touch terminals when the panel is exposed to light or during the installation. Use insulating gloves and properly isolated tools.
- DO NOT use mirrors or other devices to artificially concentrate sunlight on the panel.
- Remove any shades (such as shades from weeds, trees, buildings, etc.) which cover your solar panel while it is working.
- You must not use fabrics or other stuff to directly cover the whole or part of the surface of the product while it is working.
- Children, adults with reduced physical or mental abilities, or those who are under the influence of drugs or alcohol are not allowed to use this product.
- This solar panel is not intended to charge non-rechargeable batteries, which may cause injuries to the user or damage the panel and the controller.
- DO NOT disassemble the unit or remove any attached components. Incorrect reassembly may result in a risk of fire or electric shock.
- DO NOT operate the unit if it has been smashed, pierced, or otherwise damaged in any way.
- Please use a wet sponge or cloth to clean the unit as necessary. A mild, non-abrasive cleaning agent can be used to remove grime and dirt.
- This unit is not intended for commercial use.

PACKAGE LIST

1 PC(s) ATEM POWER Flexible Shingled Solar Panel

INSTALLATION INSTRUCTIONS


UNPACKING YOUR SOLAR PANEL

- Find a suitable location to unpack your solar panel, away from sharp objects, liquids and hazards. Ensure there is sufficient space for the panel to fully spread out.
- Please note that the panel should not bend or flex excessively or repetitively as this may cause irreversible damage, reducing its overall efficiency and weakening its internal structure.

MOUNTING YOUR SOLAR PANEL

- When mounting the panel, please ensure that there is sufficient space between the panel and the surface to increase air ventilation, so that the panel's performance can be boosted.
- Mount on either a flat or slightly curved surface that can fully support the entire panel.

TECHNICAL SPECIFICATION

MODEL NO.:	AP110SG-FLEX	AP200SG-FLEX
Panel Size:	1170*470*2mm	1170*900*2mm
Wire Size:	2.5mm ² ; 0.9m Long	
Cell Type:	Shingled Module Grade A Monocrystalline Cell	
Film Material:	ETFE	
Max. Power(PM):	110W	200W
Open-Circuit Voltage(VOC):	22.36V	22.36V
Short-Circuit Current(ISC):	6.25A	11.37A
Max. Power Voltage(VMP):	18.64V	18.64V
Max. Power Current(IMP):	5.9A	10.72A
Max. System Voltage:	100V	
Max. Series Fuse Rating:	15A	
Power Tolerance:	±3%	
Operating Temperature Range:	-20°C ~ 65°C	
Grommets:	6mm	
Waterproof rating:	IP68	
Connector Type:	MC 4	
Certifications:		

ROUTINE MAINTENANCE

- Regularly inspect your solar panels and make sure its surface is free from dust, dirt, and other debris.
- Clean with a wet cloth or glass cleaner if necessary.
- Make sure that all structural components and electrical connections are secure and clean.
- Check and replace damaged components if necessary.

TROUBLESHOOTING:

PROBLEM	CAUSE	SOLUTION
Solar panel doesn't work despite sufficient sunlight	Loose connection	Reconnect
	Bad soldering of wires inside the junction box	Contact us
Low power output	Loose connection	Reconnect
	Wrong tilt angle	Adjust the angle to capture direct sunlight.
	Shadow	Remove any shadow covering the panel
	Accumulation of dust	Clean, best on a regular basis
	High operating temperature	Ensure sufficient air circulation beneath the panel



WARRANTY



ATEM POWER ("Manufacturer") warrants, to the original purchaser, ("User") that its solar panel, if purchased from manufacturer or an authorized distributor or dealer, will be free of defects in material and/or workmanship under normal application, installation, use and maintenance conditions from the date sold and for the duration (the "Warranty Period") of 3 YEARS. Within the Warranty Period, subject to the exclusions listed below, the Manufacturer will repair, replace the solar panel or provide you with a refund at our discretion, if the unit in question are determined to be defective in material or workmanship. If the Manufacturer deems the solar panel to be not repairable, a new, similar panel will be offered, or a refund will be issued. This Limited Warranty is to the original purchaser of the solar panel and is not transferable to any other person or entity.

EXCLUSIONS:

This warranty does not cover defects that are caused by normal wear and tear, inadequate maintenance, transportation, storage or faulty repair, misuse, neglect, accident or abuse, failure to observe installation instructions or improper installation. It is recommended that the installation should be performed by suitably qualified technicians or the warranty will be voided. For further clarity, this warranty is also void if the solar panel:

is used for applications other than which it was designed and intended for,

- is not properly installed in accordance with the user manual,
- is damaged due to the non-observance of any of the instructions supplied by ATEM POWER, or defects
- resulting from any action of the purchaser including but not limited to mishandling, operation outside of design limits, or unauthorized modification,
- is disassembled, altered, or repaired by someone other than an authorized Manufacturer's agent,
- has been subject to adverse weather, extreme temperature, or physical damage,
- has been damaged by force majeure (e.g. flash of lightning, overvoltage, storm, fire),
- selected by the user is not of the correct size or specification for the intended application,
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CLAIMS:

Request return authorization. No returns will be credited without an authorization. In the case of returned products, Manufacturer's exclusive liability for breach of any warranty on the product shall be to replace the solar panel within the warranty period in accordance with the terms of this limited warranty. In no event shall Manufacturer be liable for any loss or damages of any other kind, whether direct, incidental, consequential including lost profits, exemplary, special or otherwise, including any lost profits or removal, shipping, or installation expenses.

For more information, please visit <https://atempower.com/>