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› Dabbsson Solar Generator DBS2100 Pro User Manual

Dabbsson DBS2100Pro

Dabbsson Solar Generator DBS2100 Pro User Manual

Model: DBS2100Pro

1. INTRODUCTION

The Dabbsson Solar Generator DBS2100 Pro is a high-capacity portable power station designed to provide reliable power for various applications, from home backup to outdoor adventures. Featuring a 2150Wh capacity and 2400W rated power, it is expandable up to 12.9kWh with additional battery packs. This manual provides essential information for safe and efficient operation, setup, maintenance, and troubleshooting of your DBS2100 Pro system.



Image: The Dabbsson DBS2100 Pro portable power station, highlighting its versatility for both home and outdoor use.

2. SAFETY INFORMATION

Please read all safety instructions carefully before operating the DBS2100 Pro. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Do not disassemble, repair, or modify the unit.

- Keep the unit away from heat sources, direct sunlight, and flammable materials.
- Ensure proper ventilation during use and charging.
- Do not expose the unit to water or excessive humidity.
- Use only Dabbsson-approved accessories and charging cables.
- Keep out of reach of children and pets.

Absolute Safety

Built-in battery management system (BMS) offers multi-layer comprehensive protection against overheating, low temperatures, overload, overdischarge, and leakage. Complete peace of mind in all situations.

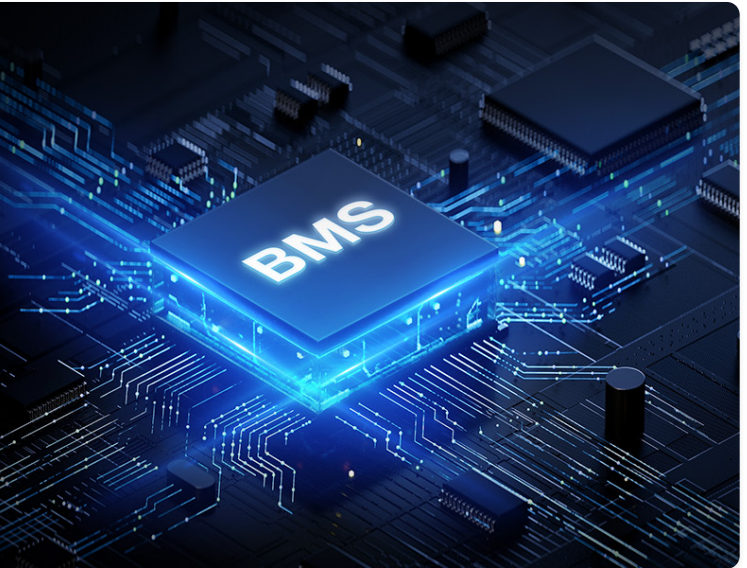


Image: Illustration of the rigorous safety testing undergone by Dabbsson's semi-solid state LiFePO4 battery, demonstrating its superior safety compared to traditional battery types.

3. WHAT'S IN THE BOX

Verify that all components are present and undamaged upon unpacking.

1. DBS2100 Pro Portable Power Station x 1
2. DBS210W Solar Panel x 3
3. AC Charging Cable x 1
4. Solar Charging Cable x 1
5. Car Charging Cable x 1
6. User Manual x 1

Uninterrupted Power When You Need It Most

DBS2100 Pro provides 15ms emergency power supply to ensure reliable, consistent power delivery for critical life support devices such as CPAP machines and ventilators.



Image: A visual representation of all items included in the DBS2100 Pro package, ensuring users can confirm receipt of all components.

4. PRODUCT OVERVIEW

The DBS2100 Pro features multiple input and output ports to accommodate a wide range of devices and charging methods.



Image: The Dabbsson DBS2100 Pro power station with its accompanying solar panels, showcasing the main unit's display and port layout.

4.1. Ports and Features

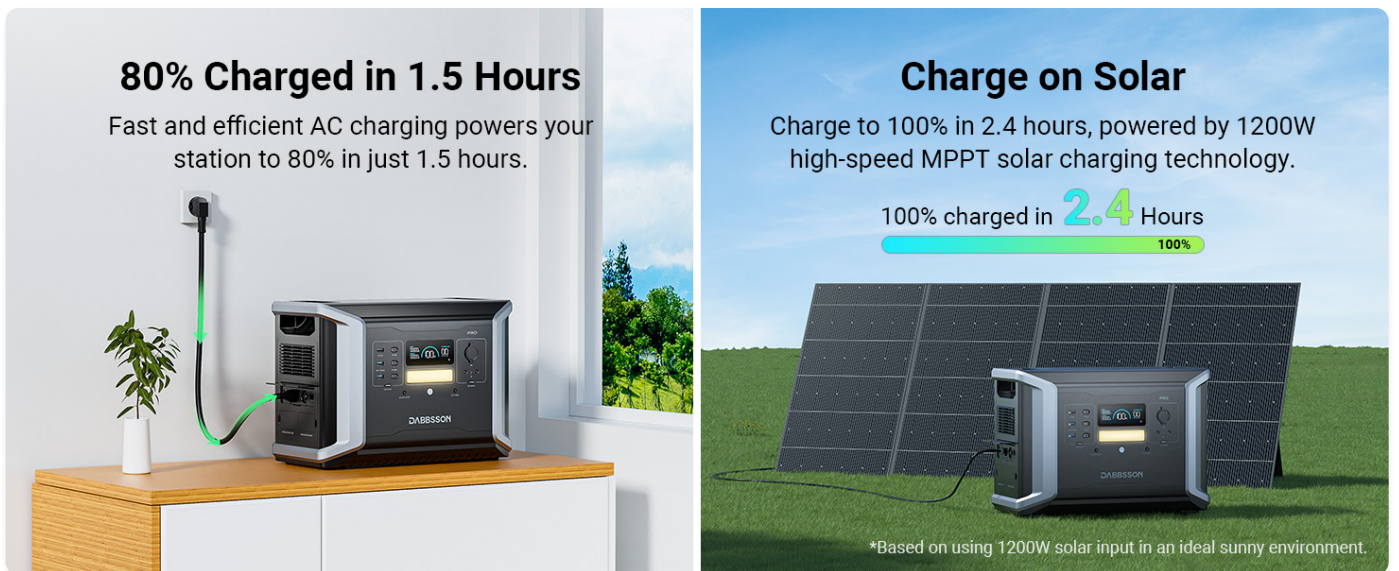


Image: A detailed diagram of the DBS2100 Pro's various ports, including USB-A, USB-C, AC outlets, Car Power Outlet, DC 5521 Port, and NEMA TT-30.

- **AC Outlets:** 120V, 2400W Pure Sine Wave output.
- **NEMA TT-30:** 20A Power-Boost 3600W.
- **USB-C Ports:** 2x 100W, 1x 30W output.
- **USB-A Ports:** 2x 18W, 1x 12W output.
- **Car Power Outlet:** 126W 10A.
- **DC 5521 Ports:** 2x 50.4W output.

- **LCD Display:** Shows battery level, input/output power, and status indicators.
- **Light:** Integrated LED light for illumination.

5. SETUP

5.1. Initial Charging

Before first use, fully charge the DBS2100 Pro. It can be charged via AC wall outlet, solar panels, or a car charger.

Workstation Tools

DBS2100 Pro x2 + DBS2100B x4

12900Wh

		
1HP Sump Pump (750W)	Angle Grinder (800W)	Power Tools (Drill) (700W)
17.2 hrs	16.1 hrs	18.4 hrs
		
Circular Saw (1400W)	Electric Lawn Mower (1500W)	
9.2 hrs	8.6 hrs	



Image: The DBS2100 Pro demonstrating its fast charging capabilities via AC wall outlet and efficient solar charging.

- **AC Charging:** Connect the AC charging cable to the unit's AC input port and then to a wall outlet. The unit can reach 80% charge in approximately 1.5 hours.
- **Solar Charging:** Connect the solar panels to the unit using the solar charging cable. For optimal charging, position panels in direct sunlight. The unit can fully charge in approximately 2.4 hours with 1200W solar input under ideal conditions.
- **Car Charging:** Use the car charging cable to connect the unit to your vehicle's 12V car outlet.

5.2. Connecting Expansion Batteries (Sold Separately)

The DBS2100 Pro's capacity can be expanded by connecting additional DBS2100 Pro units or DBS2100B battery packs.



Image: An illustration demonstrating the expandable capacity of the DBS2100 Pro, showing configurations for 2.15kWh, 4.3kWh, and up to 12.9kWh with additional units and battery packs.

- Refer to the expansion battery manual for specific connection instructions.
- Ensure all units are powered off before connecting or disconnecting expansion batteries.

6. OPERATING INSTRUCTIONS

6.1. Powering On/Off

- To power on the unit, press and hold the main power button until the LCD screen illuminates.
- To power off, press and hold the main power button until the LCD screen turns off.

6.2. Using AC/DC/USB Outputs

Press the respective AC, DC, or USB power buttons to activate the desired output ports. The LCD screen will indicate active outputs.

Rigorously Tested Safety



EMC Class B
FCC / CE Certified



Battery Nail
Penetration Test



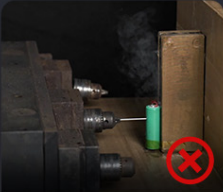
56 Environmental
Tests



Li-NMC Lithium Battery

Severe burning

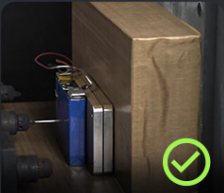
surface temperature
exceeding **500°C**



Normal LiFePO4 Lithium Iron Phosphate Battery

Battery liquid leaks,
smoke observed.

surface temperature
exceeding **110°C**



Dabbsson's Semi-Solid State LiFePO4 Battery

No explosion, no fire,
no smoke observed,

surface temperature
of **25°C**

Image: The DBS2100 Pro powering a range of household appliances, demonstrating its capability to keep essential items running during outages.

- **AC Output:** Ideal for household appliances, power tools, and electronics. The DBS2100 Pro can power up to 13 devices simultaneously.
- **P-Boost Mode:** For heavy loads up to 3600W, activate P-Boost mode via the Dabbsson app.
- **NEMA TT-30:** Provides dedicated power for RVs and other compatible equipment.
- **USB Outputs:** For charging smartphones, tablets, laptops, and other USB-powered devices. With an expansion battery, the unit can power up to 17 devices.



Image: The DBS2100 Pro connected to an expansion battery, illustrating its ability to power up to 17 devices simultaneously, including USB-C and USB-A devices.

6.3. Emergency Power Supply (EPS)

The DBS2100 Pro features an EPS function, providing power delivery within 15ms during emergencies, ensuring seamless support for critical equipment.

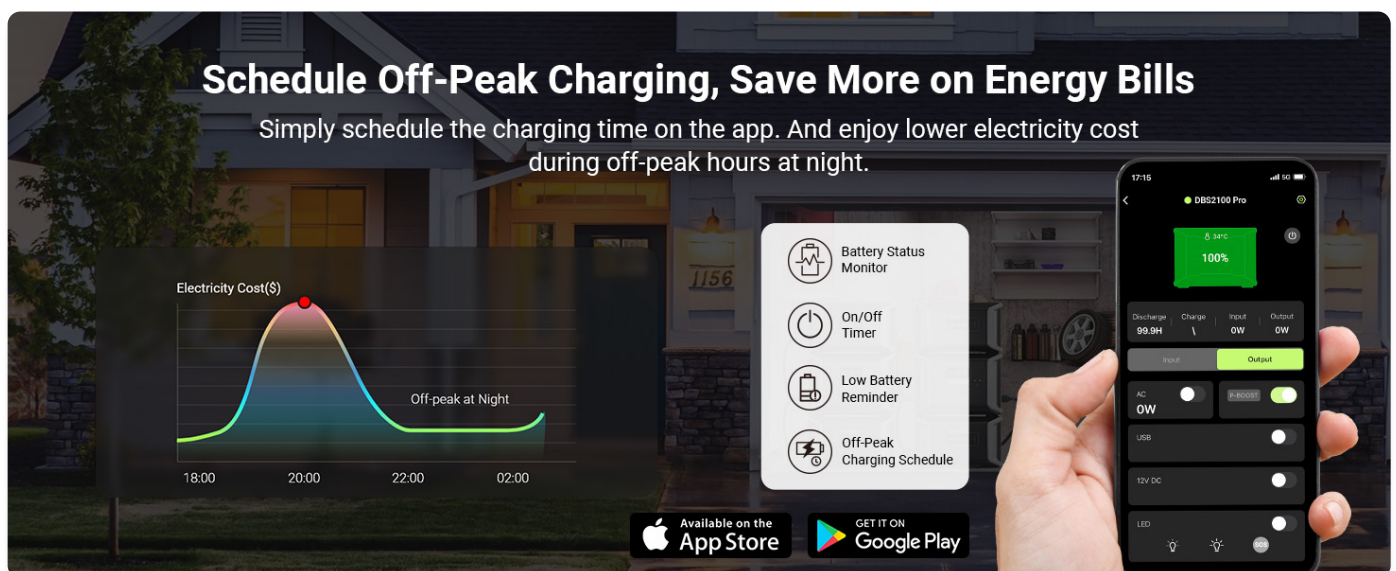


Image: The DBS2100 Pro providing uninterrupted power, demonstrating its 15ms EPS capability for critical devices like CPAP machines.

6.4. App Control

Manage and monitor your DBS2100 Pro using the Dabbsson smart app, available on the App Store and Google Play.



Image: The Dabbsson app interface, illustrating how users can schedule off-peak charging to optimize electricity costs.

- Monitor battery status, input/output power.
- Set charging/discharging schedules, including off-peak charging to save on electricity bills.
- Control unit functions remotely.

7. MAINTENANCE

7.1. Cleaning

- Wipe the unit with a dry, soft cloth.
- Do not use abrasive cleaners or solvents.

7.2. Storage

- Store the unit in a cool, dry place, away from direct sunlight and extreme temperatures.
- For long-term storage, charge the battery to 50-80% every 3-6 months to maintain battery health.

7.3. Battery Care

The DBS2100 Pro uses a Semi-Solid LiFePO4 Battery, designed for extended lifespan and safety.

2400W-4600W -Huge AC Output	1200W Fast Solar Charging	15+ Years Long-Lasting Lifespan	4500+ Charge Cycles
2.15k-12.9kWh Expandable Capacity 	Power Your RV on the Go NEMA TT-30 outlet 		Semi-Solid State LiFePO4 Battery Enhanced Durability & Superior Safety
80% Charged in 88 Mins By AC By Solar By Generator By Car 			Dabbsson App Slash Energy Bills with Off-Peak Charging

Image: A comparison showing the superior lifespan of Dabbsson's semi-solid state LiFePO4 battery, retaining 80% capacity after 4500 cycles (15 years), significantly outperforming traditional batteries.

- The battery is rated for 4500+ cycles to retain 80% capacity, equivalent to 15 years of typical use.
- Avoid fully discharging the battery frequently to maximize its lifespan.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Unit does not power on.	Battery is depleted; power button not held long enough.	Charge the unit; press and hold the power button for 3 seconds.
AC output not working.	AC output not enabled; overload protection activated.	Press the AC output button; reduce load or restart unit.
Solar charging is slow or not working.	Panels not in direct sunlight; dirty panels; incorrect connection.	Reposition panels; clean panels; check cable connections.
App connection issues.	Bluetooth/Wi-Fi off; app not updated; unit not discoverable.	Ensure Bluetooth/Wi-Fi is on; update app; restart unit and app.

9. SPECIFICATIONS

Feature	Detail
Brand	Dabbsson
Model Name	DBS2100Pro
Wattage	2400 watts (Rated), 3600W (P-Boost)
Fuel Type	Solar
Power Source	Battery-Powered / Solar Powered
Item Weight	54 Pounds
Voltage	120 Volts
Product Dimensions	17"L x 10"W x 11.9"H
Battery Type	Semi-Solid LiFePO4 Battery
Battery Capacity	2150Wh (Expandable to 12.9kWh)
AC Input	1800W
Solar Input	1200W Max
Charge Cycles	4500+ (to 80% capacity)
Lifespan	15 Years
EPS Switching Time	15ms
Total Power Outlets	13 (unit only), 17 (with expansion battery)



DABBSSON



Others 1



Others 2

Battery Cells	Semi-Solid LiFePO4 Battery	Ordinary LiFePO4 Battery	Ordinary LiFePO4 Battery
Capacity	2150Wh	2048Wh	2048Wh
Parallel Connection Function	Yes	No	No
Maximum Expansion Capacity	12900Wh	6144Wh	8192Wh
AC Input	1800W	1800W	1000W
Solar Input	1200W Max	1000W Max	700W Max
Battery Charge Cycles	4500+	3000+	3000+
Lifespan	15 Years	10 Years	10 Years
Power Lifting	3600w	3400w	3600W
UPS	15ms	30ms	20ms

Image: A detailed comparison table highlighting key specifications of the Dabbsson DBS2100 Pro against competitor models, emphasizing its advantages.

10. WARRANTY AND SUPPORT

Dabbsson provides comprehensive after-sales support for your DBS2100 Pro Solar Generator.

- **Warranty:** Enjoy a 5-year quality service warranty.
- **Customer Support:** 24/7 support is available for any inquiries.
- **Technical Help:** Lifetime technical assistance is provided.
- For support, please refer to the contact information provided in your product packaging or visit the official Dabbsson website.

