

PSII-HYBRID USER MANUAL



Content

Overview	3
Product specifications	3
Errors or omissions	3
Electronic device:Do not throw away	3
Important Safety Instructions	4
General information	4
Environmental conditions	5
Standard Packing List	6
Installation instructions	7
Mechanical Installation	7
Electric Connection	8
Start the Battery Array	9
System Setting	10



To secure the full 10-year product warranty, ensure your Puredrive PSII-DC battery is installed by a qualified installer.

Warning: Read this entire document before installing or using Puredrive PSII-DC LiFePO4 battery modules. Failure to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death - or you may damage the Puredrive Li-LV LiFePO4 battery module, potentially rendering it inoperable.



PRODUCT SPECIFICATIONS

All specifications and descriptions contained in this document are verified to be accurate at the time of printing. However, because continuous improvement is a goal at Puredrive, we reserve the right to make product modifications at any time.

The images provided in this document are for demonstration purposes only. Depending on product version and market region, details may appear slightly different.

ERRORS OR OMISSIONS

To communicate any inaccuracies or omissions in this manual, please send an email [to: sales@Puredrive-energy.co.uk](mailto:sales@Puredrive-energy.co.uk)



ELECTRONIC DEVICE: DO NOT THROW AWAY

Proper disposal of batteries is required. Refer to your local codes for disposal requirements (ie. EC N 1013/2006 among European Union).



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Important Safety Instructions

SAVE THESE IMPORTANT SAFETY INSTRUCTIONS. Puredrive PSII-DC LiFePO₄ battery module installation and repair instructions assume knowledge of high voltage electricity and should only be performed by Puredrive certified installers. Puredrive assumes no liability for injury or property damage due to repairs attempted by unqualified individuals or a failure to properly follow these instructions. These warnings and cautions must be followed when using Puredrive.

SYMBOLS IN THIS DOCUMENT

This manual uses the following symbols to highlight important information:

 Warning	WARNING indicates a hazardous situation which, if not avoided, could result in injury or death.
 Caution	CAUTION indicates a hazardous situation which, if not avoided, could result in damage to the equipment.
Note	NOTE indicates an important step or tip that leads to best results but is not safety or damage related.

GENERAL INFORMATION



Warning: Read this entire document before installing or using Puredrive PSII-DC battery. Failure to do so or to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death, or can damage the battery, potentially rendering it inoperable.



Warning: A battery can present a risk of electrical shock, fire, or explosion from vented gases. Observe proper precautions.



Warning: Puredrive PSII-DC battery installation must be carried out only by Puredrive certified installers, who have been trained in dealing with high voltage electricity.



Warning: Puredrive battery is heavy and challenging to lift.



Warning: Use Puredrive PSII-DC battery only as directed.



Warning: Do not use Puredrive PSII-DC battery if it is defective, appears cracked, broken, or otherwise damaged, or fails to operate.



Warning: Before beginning the wiring portion of the installation, first power off the inverter and then open the AC and DC disconnect switches (if applicable for the installation).



Warning: Do not attempt to open, disassemble, repair, tamper with, or modify Puredrive PSII-DC battery. Puredrive PSII-DC battery is not user serviceable. LiFePO₄ battery cells in Puredrive PSII-DC battery are not replaceable. Contact the Puredrive authorised reseller who sold the Puredrive PSII-DC battery for any repairs.



Warning: Do not connect Puredrive PSII-DC battery to alternating current (AC) carrying conductors. Puredrive PSII-DC battery must be wired to either an inverter or a DC combiner panel that is then wired to an inverter. No other wiring configuration may be used.





Warning: Puredrive PSII-DC battery contains components, such as switches and relays, that can produce arcs or sparks.



Warning: To protect Puredrive PSII-DC battery and its components from damage when transporting, handle with care. Do not impact, pull, drag, or step on PuredrivePSII-DC battery. Do not subject Puredrive PSII-DC battery to any strong force. To help prevent damage, leave Puredrive PSII-DC battery in its shipping packaging until it is ready to be installed.



Warning: Do not insert foreign objects into any part of Puredrive PSII-DC battery.



Warning: Do not expose Puredrive PSII-DC battery or its components to direct flame



Warning: Do not install Puredrive PSII-DC battery near heating equipment.



Warning: Do not immerse Puredrive PSII-DC battery or its components in water or other fluids.



Caution: Do not use cleaning solvents to clean Puredrive PSII-DC battery or expose Puredrive PSII-DC battery to flammable or harsh chemicals or vapours.



Caution: Do not use fluids, parts, or accessories other than those specified in this manual, including use of non-genuine Puredrive PSII-DC parts or accessories, or parts or accessories not purchased directly from Puredrive or a Puredrive certified party.



Caution: Do not place Puredrive PSII-DC battery in a storage condition for more than one (1) month, or permit the electrical feed on the Puredrive PSII-DC battery to be severed for more than one (1) month, without placing Puredrive PSII-DC battery into a storage condition in accordance with Puredrive's storage specifications.



Caution: Do not paint any part of Puredrive PSII-DC, including any internal or external components such as the exterior shell or casing.



Caution: Do not connect Puredrive PSII-DC battery directly to photovoltaic (PV) solar wiring.



Caution: When installing Puredrive PSII-DC battery in a garage or near vehicles, keep it out of the driving path. If possible, install the Puredrive PSII-DC battery on a side wall and/or above the height of vehicle bumpers.

ENVIRONMENTAL CONDITIONS



Warning: Install Puredrive PSII-DC battery at a height that prevents damage from flooding.



Warning: Operating or storing Puredrive PSII-DC battery in temperatures outside its specified range might cause damage to the battery.



Warning: Do not expose the Puredrive PSII-DC battery to ambient temperatures above 60°C (140°F) or below -30°C (-22°F).



Caution: Ensure that no water sources are above or near the Puredrive PSII-DC battery, including downspouts, sprinklers, or faucets.



Standard Packing List



PSII-DC LFP Battery



Battery Bracket



DC Power Cables
Battery $\leftrightarrow$ Inverter



Communication Cable
Battery $\leftrightarrow$ Inverter



M6 Expansion Bolts

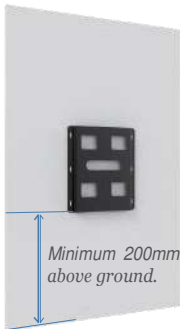


Terminator



Mechanical Installation

Single battery installation



Step-1, Confirm the exact position of battery bracket

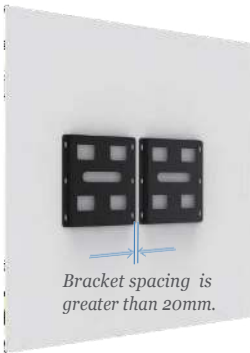


Please use **M6** expansion bolts to fix the battery bracket on the wall according to the fixed position.



Step-2, Mount the battery module to the battery bracket.

Multiple battery installation



Step-1, Confirm the exact position of battery bracket.



Please use **M6** expansion bolts to fix the battery bracket on the wall according to the fixed position.



Step-2, Mounting the battery module to the battery bracket.

Electric Connection

Top connection interface

- ① Battery<-->Inverter Power Cables(+)
- ② Battery<-->Inverter Power Cables(-)
- ③ Communication cables(up)
- ④ Communication cables(down)
- ⑤ Battery reset button
- ⑥ DC Isolator
- ⑦ Grounding Point



- ⑧ Communication cable

- ⑨ COM resistor

1. Plug in COM Resistor



2. Put on a protective cap



Step-3, Cable Connection and COM Resistor

Connect battery power cables and communication cables as shown below.

Plug in the COM resistor to the last communication interface, which is open.

Please note that even with a single battery installation or multi battery installation, COM resistor is required to strengthen the CAN Bus signal.

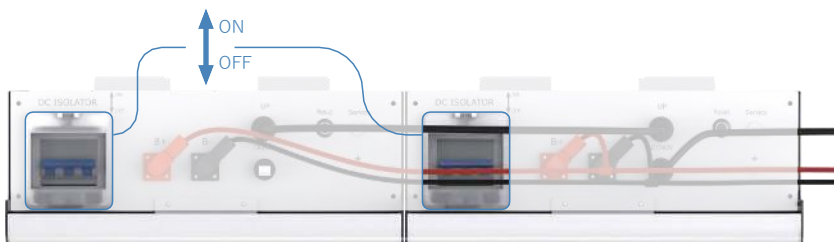
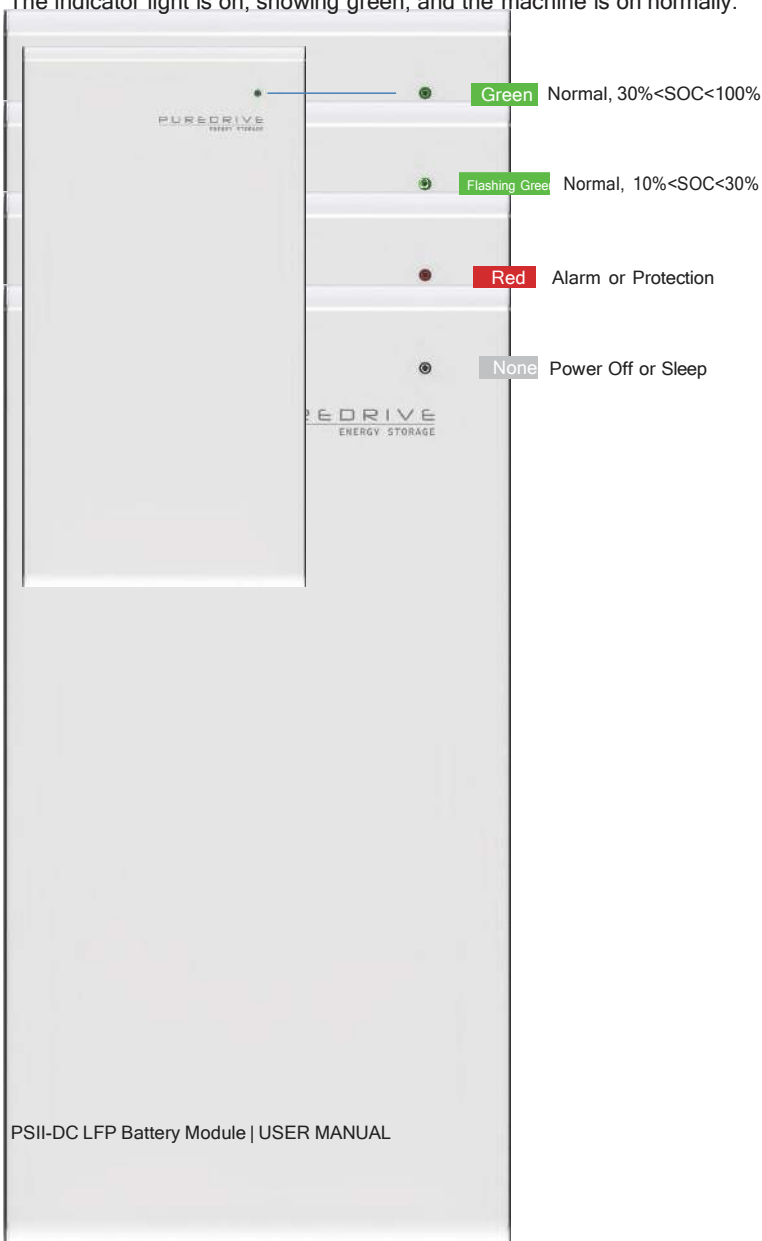


- ⑩ Puredrive standard parallel kits withstand maximum 100A current. If you have a larger load demand, you can choose to configure the DC combiner box.



DC combiner box



[illegible]

System Setting

NORMAL OPERATION

During normal operation, if PSII-DC LFP Battery Modules are installed correctly, the inverter and battery will start communication immediately, then begin to process power commands. See the inverter manual for further configuration instructions.



Warning: Do not operate PSII-DC LFP battery module unless all covers are in place.



Warning: Do not disconnect anything from or add anything to PSII-DC LFP battery module.



Caution: Do not try to communicate with PSII-DC LFP battery module using third party tools or diagnostics.



Caution: Do not lean on, stack anything on top of, or hang anything from PSII-DC LFP battery module or the conduit.

PSII-DC LFP BATTERY MODULE CARE

Keep the top edge of PSII-DC LFP battery module clear of particles to maintain optimal airflow.

To clean PSII-DC LFP Battery Module, use a soft, lint-free cloth. The cloth can be dampened with only water if needed. It should not be dripping.



Caution: Do not use cleaning solvents to clean PSII-DC LFP battery module.

