



Warranty and Commissioning Document

Thank you for purchasing this Inverter / LiFePO₄ Battery from Ellies. We trust that it will provide you with years of worry-free operation and peace of mind.

Inverter / Battery Serial Number
.....

To ensure that Ellies can honour its warranty, please work through this document as well as the product manual to ensure proper installation and operation of the equipment. All installations are to be carried out by qualified personnel.

It is the responsibility of the installer or homeowner to complete and return this document to Ellies through any of the specified channels within 10 working days from the date of purchase.

Failure to complete this document and return it to Ellies will result in any product warranty becoming null and void.

Please work through the installation manual of your product before attempting to install it or switch it on.

This document is not intended to replace the installation manual in any way and is to be used in conjunction with the manual at all times.

For any enquiries please feel free to contact Ellies at 011 490 3891 or 072 792 2744 or via email at eae@ellies.co.za



SWITCHED ON

Head Office

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Reg No. 2007/010759/07

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Warranty Form

This document was issued in May 2020 and is applicable to products purchased subsequently from Ellies. Products bought from Ellies prior to this date will be warranted by the previous version of this document as enclosed with the original purchase. This document will prevail if no other warranty document is available.

Customer Details

Type of Premises: (Mark with x) Business Home Other

Name _____ Contact Person _____
Physical Address _____ Telephone _____
_____ e-Mail _____
_____ Date Purchased _____

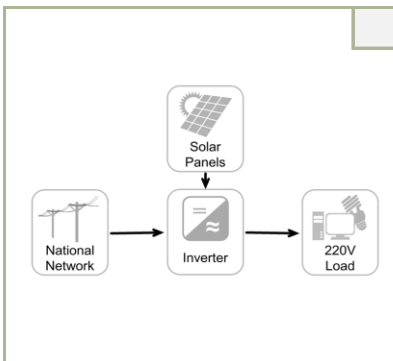
Additional Information

Installer _____ Contact Details _____
Electrician Licence Number _____
Accreditation Number from renewable energy body / affiliation _____

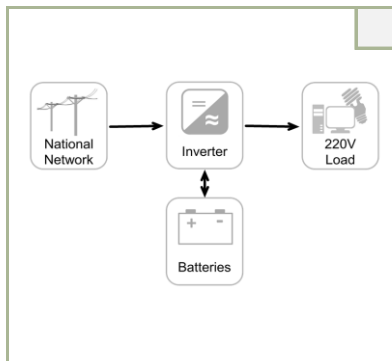
I acknowledge that I have read and understand the product manual

System Application

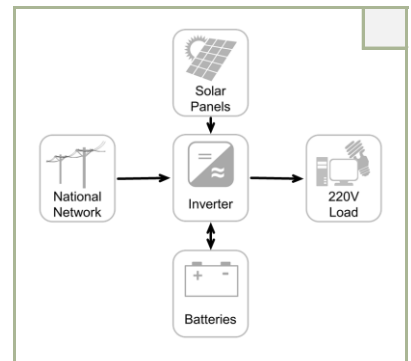
Grid Tied Only (no Battery)



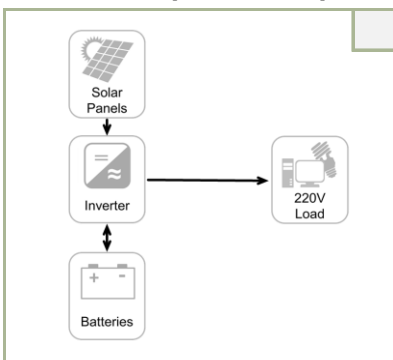
Backup Only (no Panels)



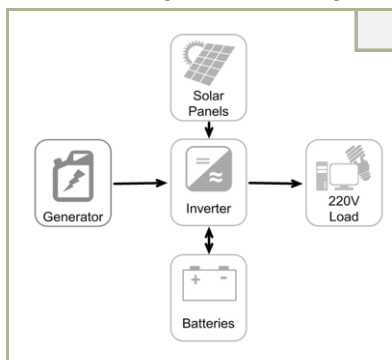
Grid Tied with Battery



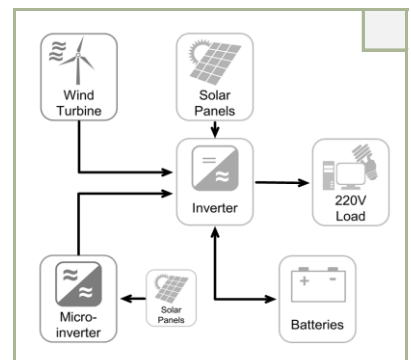
Off-Grid (no Generator)



Off-Grid (with Generator)




Wind Turbine OR Microinverters



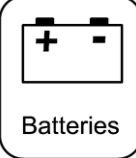
System Information

Single Phase Installation	<input type="checkbox"/>		Master	Slave	
Three Phase Installation	<input type="checkbox"/>	Designation	<input type="checkbox"/>	<input type="checkbox"/>	Total inverters in system
Parallel Installation	<input type="checkbox"/>	Designation	<input type="checkbox"/>	<input type="checkbox"/>	Total inverters in system



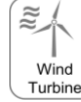
 <p>Inverter</p>	Inverter Model	Inverter Serial Number
		WIFI / GSM Logger Serial Number
		Firmware Version

If the system consists of multiple inverters, complete the remainder of this document only for the Master.

 <p>Solar Panels</p>	Panel Model	Panel Quantity		
	V_{OC}	I_{SC}		
	V_{MP}	I_{MP}		
	Combiner Box fuse rating			
	MPPT 1	<table border="0"> <tr> <td>Panels per String</td> <td>Voltage</td> </tr> </table>	Panels per String	Voltage
Panels per String	Voltage			
	MPPT 2	<table border="0"> <tr> <td>Panels per String</td> <td>Voltage</td> </tr> </table>	Panels per String	Voltage
Panels per String	Voltage			

 <p>Batteries</p>	Battery Model	Serial Number	Serial Number	Serial Number
	Total Battery Bank Capacity (kWh)	Serial Number	Serial Number	Serial Number
		Serial Number	Serial Number	Serial Number
		Serial Number	Serial Number	Serial Number

<p>Battery Cable</p> <table border="0"> <tr> <td>Cross Section (mm²)</td> <td>Length**</td> </tr> </table> <p>** All parallel cables to be the same length</p>		Cross Section (mm ²)	Length**	Fuse Rating	Yes	No	SN Setting
Cross Section (mm ²)	Length**						
		Battery compatible with Sunsynk telemetry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

 <p>Generator</p>	Model	 <p>Micro-inverter</p>	Model	 <p>Wind Turbine</p>	Model
	kVA Rating		Total Panel Capacity (kWp)		Voltage Range
<input type="checkbox"/>		<input type="checkbox"/>	Total Inverter Capacity (kW)	<input type="checkbox"/>	

Installation Checklist



Please supply pictures of steps where this icon is displayed.
 Pictures should not exceed 1MB in size

- | | | |
|--|--------------------------|--------------------------|
| <ul style="list-style-type: none"> ● Utility Application Submitted
Has the acceptance from the utility been issued before commencement. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Check installation environment
Ensure that the installation site meets environmental and physical constraints as set out in the product manual (Page 6) | Good | Poor |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Customer AC Distribution Board
System feed breaker and return isolator installed as per wiring diagram. Class II SPD present before system feeder. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Inverter Distribution Board (AC)
Inverter Distribution Board installed as per wiring diagram with Change Over Switch, Source Indicator and ELU | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Labelling
Clearly mark all relevant breakers and isolators as per NRS097 | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● DC Wiring if needed
Install combiner box and DC isolator | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Wiring and protection
Does all AC and DC wiring comply with NRS097 and Testing done. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |

Inverter Installation

- | | | |
|---|--------------------------|--------------------------|
| <ul style="list-style-type: none"> ● Unpacking the Inverter
Check inverter condition after unpacking | Good | Poor |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Mounting bracket installation
Install inverter mounting bracket according to installation instructions in user manual. | | Completed |
| | | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Inverter Installation
Carefully install the inverter to the mounting bracket and ensure it is firmly attached. Ensure the inverter has proper clearances and is properly ventilated as per installation manual. | | Completed |
| | | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● CT Installation
Install the CT that is provided with the inverter as per installation instructions. | | Completed |
| | | <input type="checkbox"/> |


Battery Installation

- | | | |
|---|--------------------------|--------------------------|
| <ul style="list-style-type: none"> ● Unpacking the batteries
Check battery condition after unpacking | Good | Poor |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● State of Charge
Check that all batteries are the same state of charge, record Voltage in Notes below | | Completed |
| | | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Mounting Batteries
Carefully install batteries as per manual. | | Completed |
| | | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Battery installation
Connect batteries as per installation manual. | | Completed |
| | | <input type="checkbox"/> |

Solar Panel Installation

- | | | |
|---|--|--------------------------|
| <ul style="list-style-type: none"> ● Solar Modules
Confirm PV module installation completion. Record the total power of the PV modules. Record all relevant details above. | | Completed |
| | | <input type="checkbox"/> |
| <ul style="list-style-type: none"> ● PV Voltage
Measure and record DC voltage. Ensure voltage and polarities are correct. Confirm the voltages are within 5% tolerance to what was tested and what is indicated in the product manual. | | Completed |
| | | <input type="checkbox"/> |

Installation Checklist Continued



- | | | |
|---|---|---|
| <ul style="list-style-type: none"> ● DC input and AC output connection
Switch off the DC and AC distribution unit, connect DC power to PV terminals of inverter, and connect AC to AC terminals of inverter. Ensure proper polarity and cable size. Torque to specifications as indicated in the installation manual. |  | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● AC grid
Measure and record AC voltage and frequency. Confirm the V_{AC} voltages are within 5% tolerance to what was tested. | | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Wiring and wire ways

Ensure that there are no loose connections on any of the terminals

Ensure that all cables running between the inverter and the solar panels are covered in trunking or conduit

Ensure that DC, AC and communication cables are not run in the same ducting | | Completed
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Grounding cable
Ensure ground cable is firmly attached to grounding lug. | Good
<input type="checkbox"/> | Poor
<input type="checkbox"/> |

Commissioning Checklist

- | | | |
|---|---|---------------------------------------|
| <ul style="list-style-type: none"> ● Wi-Fi or GSM communication dongle (if function is used)
Connect the Solarman data logger and note the serial number in the section above | | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Battery communication cable (if function is used)
Connect the battery RS485 cables as per installation manual from battery to battery and to the inverter |  | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Final DC cable check
Check all connections from battery bank |  | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Battery power up
Switch on the battery bank as per installation manual | | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> ● Supply DC / AC power

Switch On the DC switch first (Black Rotary switch)

LCD comes on and DC LED <i>illuminates</i>, the AC and Alarm lights <i>flicker</i> and the Normal LED is <i>Off</i>.
The inverter begins self-checking
"GridV.Outlimit" and "GridF.Outlimit" will be displayed, then the inverter will switch to "Standby" mode. | | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> Switch On the AC switch (Green Button)

The Grid faults will clear automatically.
In "Standby" mode both the DC and AC LED is <i>illuminated</i>, whilst the Normal and Alarm LED's are <i>Off</i>. | | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> Switch the Grid Supply Main Switch (AC Breaker) On

If the voltages of PV arrays are higher than start up voltage, the inverter will turn On. When both the DC and the AC supply to the inverter is correct it will be ready to generate power. Initially, the inverter will check both its internal parameters and the parameters of the AC grid, to ensure that they are within the acceptable limits. LCD displays the information of INITIALIZING. | | Completed
<input type="checkbox"/> |
| <ul style="list-style-type: none"> Set Basic settings as per Installation manual

Set current date and time

Check Grid parameter settings are as per regional Utility Grid code and NRS097.

Record power output of the inverter in the notes below | | Completed
<input type="checkbox"/> |

Warranty Terms and Conditions

The Sunsynk inverter range from Ellies carries a five year manufacturer's warranty from the date of purchase to be free from defective materials and workmanship.

The following Terms and Conditions are applicable to this warranty:

- 1) In this document, the term "Ellies" refers to Ellies Electronics (Pty) Ltd with Registration number 2007/010759/07 and VAT number 4690267200.
- 2) All products are to be installed by a qualified electrician with a valid Wireman's Licence as issued by the Department of Labour. The installer must further be registered with the Electrical Conformance Board of South Africa to allow them to issue of a valid Certificate of Compliance for the work completed. Ideally the installer would have been vetted by Ellies and hold an Accreditation number from the company.
- 3) The applicable sections of this warranty document must be completed in FULL and returned to Ellies within 10 working days from the date of purchase. A copy of the proof of purchase is to be submitted with the form along with any requirements stipulated later in this document.
 Documents may be submitted through any of the following channels:
 - Scan all relevant documents an email to eae@ellies.co.za
 - Visit www.ellies.co.za/warranties for online submissions
 - For further assistance please contact Ellies at (+27) 11 490 3891
(+27) 72 792 2744
- 4) Please keep all documents in a safe place as, in the event of a claim, original proof of purchase documents will be required.
- 5) The manufacturer or authorised agent will inspect the damaged product. A report and quotation will be sent to Ellies who, at its discretion, may request to inspect the damaged product prior to any claims / repairs being authorised.
- 6) Once Ellies has determined if there is a valid claim for the damaged product, Ellies will, at its sole discretion either pay for the repair costs or replace the product.
- 7) In the event of a dispute requiring legal proceedings, the claimant accepts the jurisdiction of the Johannesburg Magistrate Court
- 8) The sellers of the Sunsynk range of inverters cannot be held liable nor responsible for any warranty claims. No expressions or actions by them shall be binding upon Ellies Electronics (Pty) Ltd whatsoever.
- 9) Any other warranty, either expressed or implied and any changes to the warranty or agreement made in respect of a warranty claim unless in writing and signed by an authorised Ellies employee, shall be invalid.

- 10) If the product has been tampered with in any way this warranty will be deemed null and void.
- 11) **This warranty will not include any of the following:**
 - Service charges or service calls
 - Routine maintenance
 - Installation / Re-installation costs / Set up costs
 - Shipping and transport costs
 - Any loss and damage caused by fire, theft, flooding, abuse, misuse or any accident or act of God
 - **Ellies Electronics (Pty) Ltd will not be held liable for any claims for indirect or consequential damage beyond the repair or replacement of the affected product itself, subject to the limitations referred to here-in.**
- 12) **IMPORTANT!** Failure to comply with any of the above conditions will render the warranty any claims null and void. Should you have any doubt regarding this warranty, please do not hesitate to contact Ellies at +27 11 490 3891 or +27 72 792 2744 or email eae@ellies.co.za

Claims Procedure

In the event of a claim arising, please do the following:

- 1) Contact your installer to determine whether a site visit is necessary or if an installation error is not the cause of the issue
- 2) The installer will contact Ellies and drive the process on your behalf.
- 3) If the installer is not helpful, please contact your nearest Ellies Branch

Johannesburg	+27 11 490 3891
	+27 72 792 2744
Namibia	+264 61 24 8425
Botswana	+267 3908 807

- All AC protection devices installed as per provided Electrical Diagram
- All DC protection devices installed as per provided Diagram and manual.
- AC and DC surge protection installed as per minimum specification (Type II)
- All Electrical test performed as stipulated by the NRS and SANS Regulations.

Compliant

The Installer

Installer Licence Number

COC Number

The Customer

