

AllSpark

POWERING YOU OFFROAD

AllSpark® Pro-Series - Pure Sine Wave Inverters

OPERATION & USER MANUAL



Models:

12V 1000W

12V 2000W

12V 2500W

24V 3000W

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1. WELCOME

Thank you for purchasing your new AllSpark® Pro-Series Pure Sine Wave Inverter. Please read this manual thoroughly before installing and operating your AllSpark® Inverter. This manual contains important information and safety instructions required to obtain the performance, reliability, and safe operation for your application. Please keep this manual for future reference (or download an electronic version available at www.offroadliving.com.au). AllSpark® Pro-Series Inverters have been designed in a compact size, containing an innovative advanced microprocessor controller, with high electrical efficiency & high flow brushless cooling fans resulting in a unit you can rely on for years to come.

AllSpark® is a registered Trademark in Australia. Our products are proudly designed & developed by the team at Offroad Living. Use of this Brand name or Trademark without the express permission of Offroad Living is expressly prohibited. Offroad Living is Owned and Operated by a True-Blue Aussie family based in Perth Western Australia with suppliers and installers throughout Australia.

2. WARNINGS, CAUTIONS AND NOTES

It is critical that any operator or installer of this AllSpark® Pro-Series Inverter, reads and follows all WARNINGS, CAUTIONS AND NOTES and all installation and operation instructions. Please keep this installation manual for future reference or download an electronic copy from www.offroadliving.com.au

WARNINGS: INVERTER OUTPUT

- This heavy-duty device produces voltages more than 230V like commercial AC power you have in your home or workplace.
- There is a Danger of shock or electrocution which can cause serious harm or death if misused. Treat the Inverter output the same as commercial AC power.
- Do not use the Inverter near flammable materials or in any locations that may accumulate flammable gases.
- If using fuses for circuit protection, this electrical device will briefly spark when the final electrical connection is made between the battery and the inverter. This is normal as this is an initial charge the internal capacitors. To avoid this, use a manual reset circuit breaker in the open position during installation as the DC circuit protection on the installation.
- Do not allow water or other liquids to contact the Inverter or operate in extreme humidity. Do not allow water, snow, chemicals, dust or other foreign bodies to enter the Inverter. This may cause damage or total loss of the inverter which is not covered by the product warranty.
- Do not use appliances with damaged or wet cords.

CAUTIONS: INVERTER OPERATING ENVIRONMENT

- Surrounding air temperature should be between 0°C and 45°C. The cooler the ambient air, the more efficient the inverter will run. Keep the Inverter away from direct sunlight, if possible, to reduce operating temperatures.
- Keep the area surrounding the Inverter clear to ensure free air circulation in and out of the unit. Do not place items on or over the Inverter vents and fans during operation.
- The unit will automatically shut down if the internal temperature gets too high. Restart the Inverter after it cools.
- This AllSpark® Pro-Series Inverter is available in 12V and 24V models designed to be powered from DC Batteries. Please very carefully check the DC voltage of your Inverter and only connect it to the correct voltage battery. Failure to do so will destroy the unit beyond repair. Verify the DC voltage with your retail seller before installation if it is not clearly marked on the product or its package.
- AllSpark® Pro-Series Inverters do not have AC mains transfer compatibility built in. To achieve this, you must install a combination AC circuit breaker/Residual current device (RCD) combination along with an AC transfer device (manual or auto changeover switch can be used). Any AC cabling, connections or terminations shall be undertaken by a licensed Electrician in accordance with local wiring standards and regulations.
- Do not reverse the DC input polarity or connect to the incorrect DC voltage. This will damage the Inverter, and it will void the warranty.

 WARNING: DANGER OF BATTERY DAMAGE OR EXPLOSION/FIRE

- Loose connections or undersized cables can result in severe decreases in input voltage and significant increases in current draw beyond normal protection system control. It can cause damage to cables and insulation and can result in fire events that could lead to product and vehicle damage or total loss.
- Failure to make the correct polarity (Positive & Negative) connections between the Inverter and the battery bank can result in blowing fuses internally in the Inverter and can permanently damage the Inverter. Damage caused by reversed polarity is not covered by the product warranty.
- Making the initial connection to the DC Positive (Red +) terminal may cause a spark because of current flowing to charge the capacitors within the Inverter. This is a normal occurrence. The preferred and recommended practice to avoid terminal damage is to install a manual reset circuit breaker with the breaker open circuit plus the use of an isolating master switch, prior to making the final battery connections. Connect the cables to the inverter first, followed by the circuit breaker and master switch, then battery positive and finally the battery negative (or load side of shunt if using a battery monitor). The full end to end cable between battery and inverter must meet minimum ratings outlined in the specifications table.
- Because of the possibility of sparking however, it is extremely important that both the Inverter and the battery/s be positioned far away from any possible source of flammable gases. Failure to heed this warning could result in fire, explosion, serious personal injury, or death. As a result, these inverters are not ignition protected and not safe for installation in enclosed spaces where fuel, gases/vapours are present, or any other flammable product is in use or storage.
- Operating the Inverter without correctly grounding the unit may result in an electrical shock

 WARNING: MEDICAL OR LIFE PRESERVING DEVICES

- DO NOT use any AllSpark® Inverters to power life preserving or other critical medical equipment.

 WARNING - INSTALLATION PERSONNEL

- This product produces high currents and voltages and should not be installed by untrained or inexperienced personnel. Offroad Living highly recommends that the installation of your new AllSpark® Pro-Series Inverter is carried out by trained and certified electrical technicians. AC wiring must be carried out by a licenced electrical contractor in accordance with local wiring regulations and Australian Standards. Failure to install and connect correctly and in the appropriate order can result in damage to the inverter, circuit protection and/or battery and personal injury or death.

3. GETTING STARTED WITH YOUR ALLSPARK® INVERTER

When a motorized appliance or a tool turns on, there is almost always an initial surge of power to start up. This surge of power is referred to as the "starting load" or "peak load". Once started, the tool or appliance requires much less power to operate. This is referred to as the "Continuous Load". This electrical information is usually stamped or printed on most appliances and equipment. If this is not provided, you can calculate this as per below:

$$\text{AC AMPS X 230 VOLTS (AC voltage)} = \text{"OUTPUT WATTS"}$$

To determine the current draw from your batteries "INPUT WATTS", you take the OUTPUT WATTS that your device draws (this is will be the output power from the inverter) and multiply this by 1.1 (which is the power conversion loss from DC to AC power), then divide by 11 volts (minimum DC volts from your battery from a 12v battery/bank) to give you the maximum possible DC amps the inverter will draw from your battery of battery bank (for that specific device).

Example using a 1400W Coffee Machine

For a 12v Inverter

1400W X 1.1 = 1540W ("INPUT WATTS"). 1540W / 11V = 140A DC. This is the maximum current from the battery.

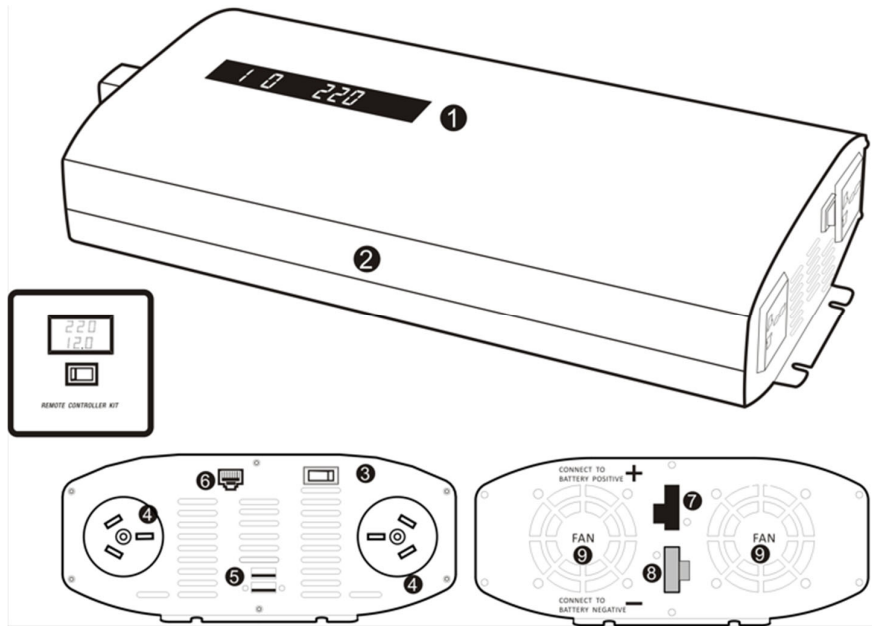
For a 24v Inverter

1400W X 1.1 = 1540W ("INPUT WATTS"). 1540W / 22V = 70A DC. This is the maximum current from the battery.

Motorized appliances such as pumps, freezers and air conditioners etc can have peak start-up loads of up to 8 times the rated continuous load. If this sort of appliance draws more than the peak power of the unit which would be outside of its protection system capability, damage can occur to the unit. This should be carefully assessed before using these appliances. Contact Offroad Living for advice should need clarification on Inverter sizing before use. Excessive high over current damage due to inappropriate appliance use may void your warranty.

FRONT PANEL AND REAR PANEL REPRESENTATION

(Subject to change over time with model improvements)



COMPONANT DESCRIPTIONS

The following items describe the components shown on the images above on each size of Inverter. These images are provided for information purposes only. Models may change slightly because of product developments and improvements over time.

1. AC & DC Voltages Digital display.
2. Black anodised aluminium housing.
3. PRIMARY POWER Switch. Turns the inverter circuits ON and OFF at the Inverter (also see remote switch operation).
4. Australian standard 3 pin outlet. Special note: Portable inverters do not have an earth pin connected.
5. Power and Protection status indicator LED's.
6. Remote controller RJ11 connection port. The remote controller kit contains a REMOTE power on/off switch and voltmeter, showing both the input DC and output AC voltages of the inverter along with any fault or error codes (if/when applicable). Connect the remote controller kit cable to this port to enable powering ON/OFF remotely. All Pro-series Inverters are supply with this remote controller.
7. DC Positive input terminal (Red) - connect it to the battery positive terminal via circuit protection.
8. DC Negative input terminal (Black) - connect it to the battery negative terminal or shunt load side if using a battery monitor.
9. High speed brushless cooling fans. The cooling fans automatically turn on to cool the inverter when the temperature inside the inverter exceeds the preset limit. It turns off when the temperature reduces.

SIZING THE BATTERY

The following is a basic guide to help determine the Ampere-hour (Ah) capacity rating that you will need to include in your battery bank sizing calculations for each appliance you wish to run from the Inverter. The sustained current producing ability of the battery should be checked with the battery manufacturers specifications to ensure it can produce the current required for your calculated demand. This is especially important with LiFePO4 batteries which have maximum output current limitations and protections built into the BMS. We recommend allowing two days of regular daily usage in your battery capacity for each appliance you wish to use each day plus a small allowance for infrequently used devices.

Follow this example to calculate an approximate battery capacity you need. Perform this calculation for each AC powered device. This example below is for a 12v system and 12v inverter. Change 11 volts to 22 volts for a 24v setup.

$$\text{Current draw} = (\text{Appliance Watts} \times 1.1) / 11 \text{ Volts}$$

$$\text{Battery Ah required} = (\text{Current draw} / 60 \text{ minutes}) \times \text{No. minutes of run time}$$

Example using a kettle of 1850W which takes 5 mins to boil

$$\text{Current draw} = (1850 \times 1.1) / 11 = 185 \text{ Amps}$$

$$\text{Battery Ah required} = (185 / 60) \times 5 \text{ minutes} = 15.4 \text{ amp hours}$$

Note:

The type of batteries you use with your high-power Inverter is important. Batteries used to start engines are not designed to be repeatedly charged and deeply discharged. We recommend using "deep cycle" batteries with enough continuous output current that exceed the maximum output current of the inverter. Small amp hour batteries will struggle to provide enough continuous current or overcome excessive voltage sag when connected to larger inverters (over 1000w) and may encounter regular drops into low voltage protection modes as a result. If you experience this, try using a larger battery or two batteries connected in parallel.

All AllSpark® LiFePO4 battery models can support a 2000w inverter. For higher wattage inverters we also have models available that are suitable to power 12v/2500w, 24v/3000w and 24v/4000w Inverters. Contact us for more information.

4. INSTALLATION

MOUNTING THE UNIT

Before installing your inverter, give adequate thought to the location of the installation to ensure sufficient airflow to both ends of the inverter and the connection and bend radius of the AC and DC cables. You should have a minimum of 75mm at each end on the inverter for connections. The installation compartment must be vented to allow for free flow of air in and out of the compartment. Over heating of the inverter will lead to reduced longevity of your inverter. Offroad Living strongly recommends that the installation and wiring of this inverter is undertaken by an appropriately trained and experienced technician that is fully versed with electrical wiring codes and regulations. Incorrect installation and/or wiring may result in damage to the inverter, personal injury and/or death.

All AllSpark® Inverter models have mounting tabs at the front and rear, each with 2 mounting slots. The inverter can be mounted on a horizontal or vertical surface. **IT MUST NOT BE INSTALLED UPSIDE DOWN** as this puts undue stress on the PCB and cooling components causing damage to the PCB over time. If mounting on a vertical surface, avoid installing the unit with vents and fans top and bottom (side to side is ok). This is purely to stop the ingress of dust, foreign bodies or accidental moisture. Your Inverter should not be mounted under the bonnet or external to the vehicle. It is not water or dust proof. Use a minimum of M5 fixings to securely mount the inverter.

SIZING THE CIRCUIT PROTECTION

When connecting the Inverter to a battery/bank, it is critical to install correctly sized circuit protection that is appropriate for the installation and the maximum current draw of the inverter. Circuit protection is installed to protect the supply cables from over current or short circuit damage. The following table provides the maximum current that each model can draw and as such provides the required circuit protection ratings for each model.



Model	Minimum Circuit Protection Rating
12V 1000W	100A
12V 2000W	200A
12V 2500W	250A
24V 3000W	150A



We recommend using AllSpark® Manual Reset Circuit Breakers for inverter circuit protection. Ensure that the circuit breaker is in the open circuit position when connecting cables during installation. If using a circuit breaker is not suitable for your installation due to space constraints or other valid reasons, then a midi or mega fuse holder/fuse of the same current rating above should be used instead. In the event of using fuses, a manual isolation switch of a higher current rating than the circuit protection must also be used. This switch should be in the off position during installation. This is for isolating the inverter circuit when not in use or during maintenance, storage, service or repairs.

SIZING THE DC SUPPLY CABLES

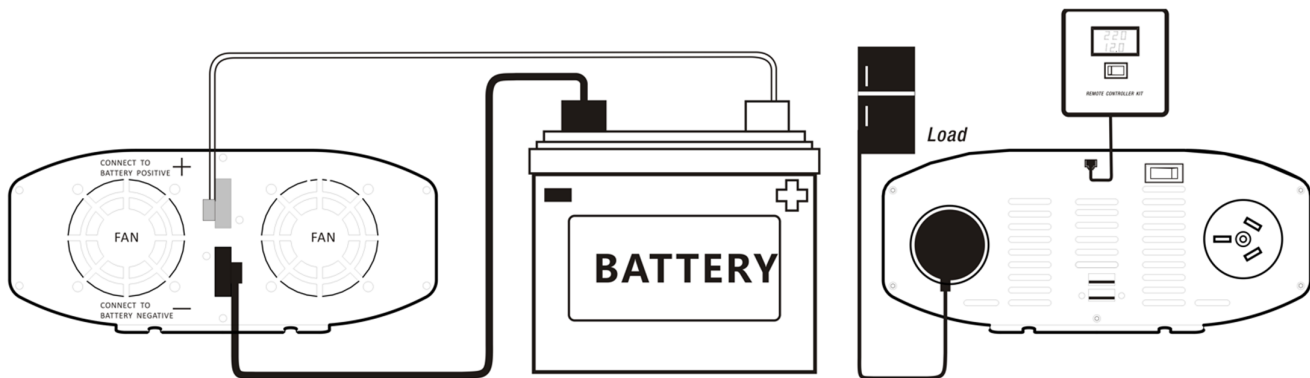
When connecting the Inverter to a battery/bank use the thickest multistranded DC rated insulated copper wire available in the shortest length practical. The cable ratings below are calculated by taking the correctly calculated maximum output power of your inverter at the lowest possible battery operating voltage to give you circuit protection sizes x 1.25. This ensures that the cable has a current rating higher than the circuit protection rating. You want the circuit protection to blow/trip in an overcurrent event and not melt/damage the cable.

The following table provides the recommended cable sizes for each model inverter based on using the recommended circuit protection ratings in the table above.

Model	Minimum cable size 0-2m	Minimum cable size 2-4m
12V 1000W	4B&S (25mm ²)	2B&S (35mm ²)
12V 2000W	0B&S (50mm ²)	00B&S (70mm ²)
12V 2500W	00B&S (70mm ²)	000B&S (95mm ²)
24V 3000W	2B&S (35mm ²)	0B&S (50mm ²)
<p>*** Installations over 4m in length should be avoided ***</p> <p>If this is not possible, please contact Offroad Living for specialised technical advice before installation</p>		

CONNECTING THE INVERTER

This Inverter needs two DC cable connections, one to Positive and one to Negative. The order of steps in the following procedure minimizes the danger of sparking near the battery bank. Please note that the circuit protection is not shown in the below image for clarity but **MUST** be installed for every installation on the positive connection within 15 to 30cm of the battery terminal. Should your installation include a shunt for a battery monitor, this negative cable from the inverter should be connected to the load (L-) side of the shunt, rather than directly to the battery terminal. In this scenario, it is critical that the final cable or busbar connection from the Shunt battery terminal (B-) to the battery negative terminal is also of the same or higher current rating as per the table in Section 4 above.



1. Before mounting and connecting the Inverter, the Inverter PRIMARY ON/OFF switch and REMOTE control ON/OFF switch must be in the OFF position.
2. The Inverter should be securely mounted horizontally or vertically (but not upside down), using corrosion-resistant fasteners sized M5/10g or larger.
3. Prepare all cables with correctly sized cable lugs – all Pro-series inverters have M8 DC lugs.
4. The circuit protection must be installed in the positive cable as close as possible to the battery bank (ideally within 30cm) to protect the cable from excess current draw or short circuit in the event of a damaged cable.
5. Ensure all appliance cords or extension cords are disconnected from the Inverter.

NOTE: Before making any cable connections to the battery or inverter, it is important to ensure that the circuit breaker or isolation switch is in the open circuit/off position.

6. Connect the first (red +) positive cable to the Inverter positive (red +) terminal and the other end to the load side of the circuit breaker or fuse (CB should be in open/isolated position)
7. Connect the second (red +) positive cable to the battery/source side of the circuit breaker/fuse and the other end to the battery positive (or positive busbar if applicable). If using a busbar, the full length of cable from battery terminal to inverter terminal must meet the minimum current ratings as per Section 4.

8. Connect the (black -) negative cable to the Inverter's negative (black -) terminal and the other end to the isolation switch (if in use) or load terminal (L-) of battery monitor shunt. If no shunt is in use, then it connects directly to battery negative or negative busbar (if in use). If using a negative busbar, the full length of cable from the battery terminal to inverter terminal must meet the minimum current ratings as per Section 4.
9. If using a battery monitor shunt, the cable from battery to shunt and shunt to isolation switch and switch to inverter must all be of the correct current rating as per the cable sizing table in Section 4 above.
10. Once all cables are connected, install the insulated terminal covers. Depending on the brand and dimensions of the cable lugs you use (also determined by length of cable run and gauge of cable), you may need to trim corners off the terminal covers with some brands of lugs. This can be done with a craft knife or by sanding the protruding corners off. If using right angle lugs, you will not be able to use the terminal covers and should use other cable lug boots instead.

NOTE: Sparking and minor terminal marking is to be expected if you do not install a circuit breaker or isolation switch in the off position on the initial cable connections. This is normal as it is charging the capacitors internally. This can be avoided by following the steps 1-9 above.

INSTALLING THE REMOTE CONTROL PANEL

The use of the Remote Control Panel is option. The inverter can be used with or without it. If you choose to use the remote control panel for ease of operation, please follow the installation instructions below.

1. Identify a suitable mounting location for the remote panel – ensure it is easy to access and visible as a reminder that it is on in case you forgot to turn it off when the inverter is not in use. Whilst it uses very low power at idle, it's always best to avoid unnecessary battery capacity consumption if it can be avoided.
2. The mounting location should consider the depth of the body of the remote switch and the cable penetration behind it. The switch panel and cable radius behind it requires a minimum of 35mm from the front face of the surface of the cabinet or panel you mount the remote controller on. i.e. if the cabinet is 16mm thick, then the remote control panel will protrude another 19mm into the void behind it. Install in a location that small children will not be able to access.
3. Before cutting the hole – ensure there is no cables, pipes or other structures behind the mounting surface.
4. Cut a square hole of at least 75mm x 75mm up to a maximum of 77mm x 77mm
5. Insert the remote panel into the cutout and secure with screws.
6. Identify a path for the communications cable to run from the remote control panel to the front face of your new AllSpark® Pro-series inverter. Protection the cable in appropriate ducting or sheathing and secure the cable to ensure it doesn't move about unnecessarily.
7. Once connected and the inverter is ready to power up, see Section 5 (5) for instructions on remote controller use.

5. OPERATION

1. Check the battery voltage to make sure it matches the DC input voltage of the Inverter. Only connect a 12V DC input Inverter to a 12V DC battery or 24V DC input inverter to 24V DC battery and so on. Connection to the incorrect voltage can result in damage that is not covered by warranty.
2. On the first use, please use a small wattage appliance (under 100w) to test the installation is safe, correctly installed and free of any defects.
3. Turn On ("I") the Inverter. Make certain the overload audible alarm doesn't sound
4. Turn OFF ("0") the Inverter. The audible alarm may also sound a short "chirp". This is normal
5. Turn ON the inverter. The inverter starts a self-detection procedure, the audible alarm beeps once at the same time and the power indicator will be lit green. The LCD display on the top cover will show the program code and then shows the input and output voltage. AllSpark® Pro-series Inverters have a soft starting function, turning ON power to your appliances after 3 seconds. If your inverter comes with a remote controller kit, remember to connect the remote controller kit to the RJ11 network port on the output side panel. To switch on the inverter remotely, leave the PRIMARY ON/OFF switch on the inverter body in the OFF position and turn the inverter on by operating the power switch on the remote controller kit. Please keep the remote controller kit away from the reach of the children and keep it dry and dust free. Which ever switch you use to turn on the inverter should also be used that use to also turn the inverter off. i.e. turning on the inverter from the main switch, then switch on the remote switch will only power up the remote display. Turn if off at the remote switch won't turn off the inverter unless you also turn off the switch at the inverter itself.
6. Turn the appliance ON.

Notes:

The audible alarm may make a momentary "chirp" when the Inverter is turned OFF. This same alarm may also sound when the Inverter is being connected to or disconnected from the 12V DC battery bank. When using an extension cord from the Inverter to an appliance the extension cord should not be longer than 15m and ideally should be of good quality and cable thickness to ensure no voltage drop along the cord.

6. SPECIFICATIONS

Model	12V 1000W	12V 2000W	12V 2500W	24v 3000w	
Input Voltage (nominal) (V)	12			24	
Input Voltage Range (V)	9.6 – 15			19.2 - 30	
Idle Current (A)	0.2	0.8		0.4	
Efficiency (%)	>95	>92			
Input Terminal	M8 thumb screws Red & Black	M8 Red & Black with flat washer, spring washer and nut + Insulated terminal covers			
AC Output					
Output Voltage (V)	230 V +/- 5% as per Australian Standards				
Continuous Output Power (W)	1000	2000	2500	3000	
Surge (Startup) Power (W)	2000	4000	5000	6000	
Output Frequency (Hz)	50				
Output Receptacle (Australian Standard)	1 x 3 pin	2 x 3 pin			
USB Port	2 x USB A	N/A			
Protection					
DC Under Voltage Protection	9.0V +/- 0.5V DC	10 +/- 0.5V DC		20 +/- 0.5V DC	
DC Over Voltage Protection	15.0 +/- 0.5V DC			30 +/- 0.5V DC	
Overload	CPU Controlled auto shutdown				
DC Reverse Polarity	Internal Fuse Protection – not user serviceable				
Short Circuit	CPU Controlled auto shutdown				
Over Temperature					
Audible Alarm	Input DC under/over voltage, fault, over current, over temperature				
Cooling	Intelligently controlled by CPU – Brushless fans				
No. of Fans	1	2			
Display & Indication					
LED Indicator	Green LED Power Status Indicator will be illuminated if the device is working correctly. Red LED illumination if there is a fault or device has entered protection mode				
LCD Display	Display Input & Output Voltages and basic state of charge indicator	LDC Display of Input DC and Output AC Voltages, Error/Fault codes, on/off switch			
Remote Control Panel	N/A	LDC Display of Input DC and Output AC Voltages, Error/Fault codes, on/off switch			
Installation Requirements					
Circuit Breaker (a)	100A	200	250	150	
DC Cable Size (B&S)	Up to 2m	4	0	00	2
	2-4m	2	00	000	0
Physical					
Case	High Quality Black Anodised Aluminium				
Dimensions (L x W x H mm)	280 x 160 x 90	395 x 220 x 92	47 x 220 x 92		

Weight (kg)	3.6	4.6	5.4
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*Specifications are subject to change without prior notice.

7. TROUBLESHOOTING

FAULT CODES

Code	Buzzer alarm	Protection description	Solution
E1	1 Beep	Battery low voltage protection	1.Reduce the load power capacity. 2.Turn off the load, and then charge the battery pack.
E2	2 Beeps	Battery over voltage protection	Turn off the inverter, discharge the battery to reduce the battery voltage. Restart inverter.
E3	4Bbeeps	Over Temperature protection	Disconnect the load from the inverter, connect it to the inverter again after the inverter cools down, and reduce the load power capacity.
E4	No alarm	Communication error	Contact after sales service
E11	Continuous Beep	Short circuit protection	Disconnect the load, check the wiring of both the inverter and the load appliance. If no fault found, and error doesn't clear, stop using Inverter and Contact after sales service.
E12	3 Beeps	Overload protection	Reduce the load power capacity
E13	No alarm	Under high AC voltage	Contact after sales service – Discontinue Inverter Use
E14	No alarm	Over high voltage	Contact after sales service – Discontinue Inverter Use
E15	No alarm	Driver error	Contact after sales service – Discontinue Inverter Use

SERVICE & TECHNICAL SUPPORT

If you require technical assistance with the installation, operation or repair of your AllSpark® Pro-Series Inverter, please contact:

Offroad Living

Unit 2, 29 Prestige Parade, Wangara WA 6065

Ph: 08 6205 6868

8. WARRANTY

In the unlikely event of a product technical issue of fault, please contact Offroad Living Technical support on 08 6205 6868.

Due to changes in product design and improvements over time, effective from the 1st of Sept 2022 AllSpark® Pro-Series Inverters come with a 36-month return to base warranty. All models sold prior to this date have a 24-month warranty.

The warranty only applies to the original purchaser. It is warranted to be free of material or workmanship defects for the warranty period outlined above.

This warranty is the only warranty applicable to your AllSpark® PS-Series Inverter. No other warranty is specified or implied regarding its fitness for purpose for your application other than that specified in this document.

The warranty is limited to the dollar value of the original purchase price paid of the original product itself only and expressly excludes incidental or consequential damage that may result in relation to use of this inverter. The warranty does not cover incorrect installation or incorrect use and does not extend to any other components such as cables, circuit protection, batteries etc and does not cover damage of defects from normal wear and tear, including scratches, chips, dents nor accidents, shipping damage, modification by users, misuse, or abuse.

The warranty does not cover commercial use or industrial applications. Contact us for details on commercial or heavy-duty applications.

Our Goods come with guarantees that cannot be excluded under the Australian Consumer Law. See the full extent of our Terms and Conditions of Sale and detailed warranty information below

https://www.offroadliving.com.au/assets/files/Offroad_Living_Retail_Terms_and_Conditions_of_Sale.pdf

If you have any queries about service in or out of the Warranty period, please contact us by email at warranty@offroadliving.com.au or by phone on 08 6205 6868

Warranty requests can be made on our website using the following URL.

<https://www.offroadliving.com.au/warranty>

9. THE LEGAL STUFF

The following information is applicable for any purchase directly from Offroad Living and not from retail re-sellers.

A copy of our Warranty Policy, Terms & Conditions of Sale and Privacy Policy can be found at the bottom of every page on our website at <https://www.offroadliving.com.au/>

These documents outline your rights and obligations under this Warranty and Australian Consumer Law with regards to Consumer Guarantees.

For any technical queries about this product, you can email us at contact@offroadliving.com.au

If purchased through an authorized third party or reseller, please refer any initial enquires to the original place of purchase for technical support or warranty enquiries.