



# RED POLE ENERGY



Company  
Overview

[www.redpoleenergy.co.za](http://www.redpoleenergy.co.za)

# Your Lithium Battery Specialists

## Who Are We?

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At Red Pole Energy, we've specialised in developing and supplying lithium batteries for over 12 years.

Our strength lies in creating bespoke batteries tailored to meet specific customer requirements. We believe in delivering solutions that precisely match your energy storage needs.

Located in Stellenbosch, our headquarters offer immediate access to engineering technical support, ensuring you have the assistance and expertise you require, right when you need it.

Red Pole Energy is your trusted and reliable partner for lithium battery solutions.

## Why Red Pole Energy?

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### Customised Solutions For Unique Needs

Tailored battery solutions for your business to fit your specific requirements.



### Local Training and Technical Support

We offer comprehensive training on all technical aspects of the batteries, ensuring you have the knowledge to achieve success with them. Our team will provide you with all the technical support needed to ensure the successful completion of all installations.



### Premium Quality

With our extensive experience in product development and lithium battery technology, we are committed to providing the highest quality solutions.

# Benefits of Lithium Batteries



## Extended Lifespan

Say goodbye to frequent replacements! Red Pole Lithium batteries are engineered to deliver a lifespan of more than 5 years, making them a cost-effective long-term investment.



## Performance and Safety

Trust in the safety and performance of our lithium batteries. Their long design life means many years of worry-free operation, ensuring a secure and efficient power source for your needs.



## Warranty

Have peace of mind with our industry-leading warranty. Our batteries are built to handle up to three charge and discharge cycles per day, providing unmatched durability.

# Our Product Range



## 12V and 24V Lithium Battery Range

Our Lithium Iron Phosphate batteries are direct replacements for Sealed Lead Acid batteries. Backed by a 3-year warranty (3000 cycles) and an expected lifespan exceeding 5 years, these batteries ensure long-lasting and dependable power. Typical uses include gate motors, small inverters, access control, CCTV backup power and secondary vehicle batteries.



## 51V Lithium Battery Range

Our 51V Lithium Iron Phosphate batteries are engineered to meet the demands of residential and small commercial backup power. Backed by a standard 5-year warranty (6000 Cycles) with 10 years optional. An expected lifespan exceeding 15 years, these batteries ensure long-lasting and dependable power. Typical uses include residential solar, commercial solar, peak shaving, large inverters, time of use and tariff arbitrage.



## Energy Monitoring

We offer a range of energy metering and monitoring solutions to help you keep track of your energy usage and optimize your energy system's performance. Our monitoring solutions allow you to remotely monitor your energy system's performance, giving you real-time insights into your energy consumption and generation.

# 12V Lithium Battery Range



## Direct Replacements for Lead Acid Batteries



### Sealed, water and dust resistant

Our lithium batteries come in a highly durable sealed plastic enclosure, offering water and dust resistance.



### Warranty

3 years, 3000 cycles at 80% DoD. Industry-leading warranty, which ensures unparalleled durability for our batteries.



### Expected Lifespan

Up To 10 x longer than a typical lead acid battery. Red Pole's lithium batteries are renowned for their exceptional lifespan, providing long-lasting and reliable power.



### Performance and Safety

Trust in the safety and performance of our LiFePO4 lithium batteries, designed to provide you with a secure and efficient power source, guaranteeing your peace of mind.



### BMS Protection

Every battery features an integrated Battery Management System, that protects the cells and ensures a long lifespan.



Model	12v 6Ah	12v 12Ah	12v 18Ah
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>Direct Replacement for Gate Motors, CCTV, Electric Fences, Access Control and alarm systems that use 12V 7Ah Lead Acid Batteries.</li> <li>NOT Compatible with all small UPS</li> </ul>		<ul style="list-style-type: none"> <li>Backup Power for Gate Motors, CCTV, Electric Fences, Access Control and Alarms Systems</li> </ul>

Model	12V 50Ah	12V 100Ah	12V 200Ah
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>Battery for small inverters &lt; 1000W</li> <li>It has the same usable capacity as a 12v 100Ah Lead Acid Battery</li> <li>LCD Battery Voltage &amp; Capacity Screen</li> </ul>	<ul style="list-style-type: none"> <li>Battery for small inverters &lt; 1000W</li> <li>Double and 4 times usable capacity as a 12v 100Ah.</li> <li>LCD Battery Voltage &amp; Capacity Screen</li> <li>(Bluetooth &amp; RS485 Communication Optional)</li> </ul>	

Model	RP-12V-6AH	RP-12V-12AH	RP-12V-18AH
Nominal Voltage	12.8V	12.8V	12.8V
Usable Capacity	76.8Wh	153.6Wh	230.4Wh
Nominal Capacity @ 0.2C	6Ah	12Ah	18Ah
Dimensions (L x W x H)(mm)	152 x 65 x 104	152 x 65 x 104	175 x 83 x 188
Weight (kg)	0.77kg	1.4kg	2.1kg
Terminal   Connectors	F2 Terminals	F2 Terminals	M5 Terminals
Display	None	None	LCD SOC & V
Discharge Current   Max Continuous	10A	12A	18A
Peak Discharge Current (< 3s)	20A	30A	40A
Charge Current   Max Continuous	10A	12A	18A
Cell Type	Cylindrical LFP   LiFePO4		
Operating Voltage Range	10V - 14.6V		
Recommended Discharge Low Voltage	12V		
Recommended Bulk Charge Voltage	14.4V		
Recommended Float Charge Voltage	13.8V		
Self-Discharge Rate	< 3.5% per month		
Operating Temperature Range	Charge: 0°C to 45°C   Discharge: -20°C to 60°C		
Humidity Range	< 95% RH		
Protection	Over-voltage   Under-voltage   Short circuit		
IP Rating	IP65		
Casing Material	ABS Plastic		
Expected Lifespan	100%DoD > 2000 cycles   80%DoD > 3000 cycles   50%DoD > 5000 cycles (0.2C charging and discharging, 25°C)		
Warranty	3 years / 3000 cycles at 80% DoD		
Certifications	UN38.3   MSDS   UL1973   UL9540A		

Model	RP-12V-50AH	RP-12V-100AH	RP-12V-200AH
Nominal Voltage	12.8V	12.8V	12.8V
Usable Capacity	640Wh	1280Wh	2560Wh
Nominal Capacity @ 0.2C	50Ah	100Ah	200Ah
Dimensions (L x W x H)(mm)	223 x 150 x 178	328 x 172 x 216	522 x 238 x 217
Weight (kg)	6kg	12.7kg	23.5kg
Terminal   Connectors	M6 Terminals	M8 terminals	M8 terminals
Display	LCD SOC & V	LCD SOC & V	LCD SOC & V
Discharge Current   Max Continuous	50A	100A	200A
Peak Discharge Current (< 3s)	100A	200A	400A
Charge Current   Max Continuous	50A	100A	100A
Cell Type	Cylindrical LFP   LiFePO4		
Operating Voltage Range	10V - 14.6V		
Recommended Discharge Low Voltage	12V		
Recommended Bulk Charge Voltage	14.4V		
Recommended Float Charge Voltage	13.8V		
Self-Discharge Rate	< 3.5% per month		
Operating Temperature Range	Charge: 0°C to 45°C   Discharge: -20°C to 60°C		
Humidity Range	< 95% RH		
Protection	Over-voltage   Under-voltage   Short circuit		
IP Rating	IP65		
Casing Material	ABS Plastic		
Expected Lifespan	100%DoD > 2000 cycles   80%DoD > 3000 cycles   50%DoD > 5000 cycles (0.2C charging and discharging, 25°C)		
Warranty	3 years / 3000 cycles at 80% DoD		
Certifications	UN38.3   MSDS   UL1973   UL9540A		

# 24V Lithium Battery Range



## Direct Replacements for Lead Acid Batteries



### Warranty

3 years, 3000 cycles at 80% DoD. Industry-leading warranty, which ensures unparalleled durability for our batteries.



### Expected Lifespan

Up To 10 x longer than a typical lead acid battery. Red Pole's lithium batteries are renowned for their exceptional lifespan, providing long-lasting and reliable power.



### Sealed, water and dust resistant

Our lithium batteries come in a highly durable sealed plastic enclosure, offering water and dust resistance.



### Performance and Safety

Trust in the safety and performance of our LiFePO4 lithium batteries, designed to provide you with a secure and efficient power source, guaranteeing your peace of mind.



### BMS Protection

Every battery features an integrated Battery Management System, that protects the cells and ensures a long lifespan.



Model	24v 4Ah	24v 6Ah	24V 12Ah
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>Direct Replacement for 24V Garage Door Lead Acid Battery</li> <li>ET Nice, Centurion Compatible</li> </ul>	<ul style="list-style-type: none"> <li>Direct Replacement for 24V Garage Door Lead Acid Battery</li> </ul>	<ul style="list-style-type: none"> <li>Backup power for 24V Gate Motors, CCTV, Electric Fence, Access Control, Alarm Systems</li> </ul>

Model	24V 50Ah	24V 100Ah	24V 200Ah
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>Backup Power for 3kVA Inverters or 24v Networking Equipment</li> <li>Neat &amp; Efficient - don't need to put 2 X 12V in Series</li> <li>LCD Battery Voltage &amp; Capacity Screen</li> <li>(Bluetooth Optional)</li> <li>(RS485 Communication Optional)</li> </ul>		

Model	RP-24V-4AH-GD	RP-24V-6AH	RP-24V-12AH
Nominal Voltage	25.6V	25.6V	25.6V
Usable Capacity	102.4Wh	153.6Wh	307.2Wh
Nominal Capacity @ 0.2C	4Ah	6Ah	12Ah
Dimensions (L x W x H)(mm)	180 x 73 x 69	152 x 65 x 104	188 x 83 x 187
Weight (kg)	1.2kg	1.4kg	2.8kg
Terminal   Connectors	F1 Terminals	F2 Terminals	M6 Terminals
Display	None	None	None
Discharge Current   Max Continuous	10A	10A	20A
Peak Discharge Current (< 3s)	12A	20A	40A
Charge Current   Max Continuous	4A	10A	20A
Cell Type	Cylindrical LFP   LiFePO4		
Operating Voltage Range	20V - 29.2V		
Recommended Discharge Low Voltage	24V		
Recommended Bulk Charge Voltage	28.8V		
Recommended Float Charge Voltage	27.6V		
Self-Discharge Rate	< 3.5% per month		
Operating Temperature Range	Charge: 0°C to 45°C   Discharge: -20°C to 60°C		
Humidity Range	< 95% RH		
Protection	Over-voltage   Under-voltage   Short circuit		
IP Rating	IP65		
Casing Material	ABS Plastic		
Expected Lifespan	100%DoD > 2000 cycles   80%DoD > 3000 cycles   50%DoD > 5000 cycles (0.2C charging and discharging, 25°C)		
Warranty	3 years / 3000 cycles at 80% DoD		
Certifications	UN38.3   MSDS   UL1973   UL9540A		

Model	RP-24V-50AH	RP-24V-100AH	RP-24V-200AH
Nominal Voltage	25.6V	25.6V	25.6V
Usable Capacity	1280Wh	2560Wh	5120Wh
Nominal Capacity @ 0.2C	50Ah	100Ah	200Ah
Dimensions (L x W x H)(mm)	328 x 172 x 216	522 x 238 x 217	522 x 238 x 217
Weight (kg)	12.8kg	25kg	38kg
Terminal   Connectors	M8 terminals	M8 terminals	M8 terminals
Display	LCD SOC & V	LCD SOC & V	LCD SOC & V
Discharge Current   Max Continuous	50A	100A	200A
Peak Discharge Current (< 3s)	100A	200A	400A
Charge Current   Max Continuous	50A	100A	200A
Cell Type	Cylindrical LFP   LiFePO4		
Operating Voltage Range	20V - 29.2V		
Recommended Discharge Low Voltage	24V		
Recommended Bulk Charge Voltage	28.8V		
Recommended Float Charge Voltage	27.6V		
Self-Discharge Rate	< 3.5% per month		
Operating Temperature Range	Charge: 0°C to 45°C   Discharge: -20°C to 60°C		
Humidity Range	< 95% RH		
Protection	Over-voltage   Under-voltage   Short circuit		
IP Rating	IP65		
Casing Material	ABS Plastic		
Expected Lifespan	100%DoD > 2000 cycles   80%DoD > 3000 cycles   50%DoD > 5000 cycles (0.2C charging and discharging, 25°C)		
Warranty	3 years / 3000 cycles at 80% DoD		
Certifications	UN38.3   MSDS   UL1973   UL9540A		

# 51V Lithium Battery Range



## Solar Storage & Backup Power Solutions



### Warranty

5 Years, 6000 cycles at 80% DoD (10-Year option). Industry-leading warranty, which ensures unparalleled durability for our batteries.



### Expected Lifespan

More than 10 years. Red Pole's lithium batteries are renowned for their exceptional lifespan, providing long-lasting and reliable power.



### Easy Installation

The product can be either wall-mounted or used as a free-standing unit, and it comes with wall mounting brackets along with quick-connect cables. Additionally, it is designed to be compatible with leading inverter brands.



### Expandable Capacity

Max 15 units (Vital 5) in parallel to extend capacity to 75kW. Full communication between units. Auto master-slave setup.



### Performance and Safety

**1C Rated** Trust in the safety and performance of our LiFePO<sub>4</sub> lithium batteries, designed to provide you with a secure and efficient power source, guaranteeing your peace of mind.



### BMS Protection

Every battery features an integrated Battery Management System. Compatible with leading inverter brands.



Model	Vital - 5	Vital - 10
Typical Uses	<ul style="list-style-type: none"> <li>Residential solar and backup systems</li> <li>5/8kW 48v Inverters</li> </ul>	

Model	Vital-5	Vital-10
Nominal Voltage	51.2V	51.2V
Usable Capacity	5120Wh	10240Wh
Nominal Capacity @ 0.2C	100Ah	200Ah
Operating Voltage	40V - 58.4V	40V - 58.4V
Max Discharge Current	100A	200A
Max Charge Current	100A	200A
Cell Type	Prismatic LFP   LiFePO <sub>4</sub>	
Recommended Inverter Settings		
Recommended Discharge Low Voltage	48V	48V
Recommended Bulk Charge Voltage	56.16V	56.16V
Recommended Float Charge Voltage	55V	55V
Recommended Charge Current	25A	50A
Recommended Discharge Current	50A	100A
General Specifications		
Dimensions (L x W x H)(mm)	470 x 142 x 520	590 x 142 x 800
Weight (kg)	47.2kg	96.5kg
Scalability	Up to 15 Units in Parallel	Up to 8 Units in Parallel
Terminal   Connectors	Quick Connect	
Operating Temperature Range	Charge: 0°C to 55°C   Discharge: -20°C to 60°C	
Humidity Range	<95% RH	
Protection	Over-voltage   Under-voltage   Short circuit Built in DC Isolator Switch	
IP Rating	IP65	
Expected Lifespan	80%DoD > 6000 cycles   25°C   0.5C charging and discharging   60% EOL	
Warranty	5 Years, 10 Years Optional	
Certifications	CB, CE (EMC&LVD), UL1973, UL9540A, UN38.3, MSDS	
Communication		
Display	SOC Status Indicator, LED Indicator	
Communication	RS232   RS485   CAN	
Included		
Mounting options	Floor Standing & Wall mount brackets included	
Cables	Battery Cables (1m long each, quick connect terminal and 10mm terminal)	
Extra Connectors	Quick connectors (if using in parallel)	

# Energy Monitoring

Energy consumption monitors that connect via Wi-Fi to enable you to track the electricity usage of your home or commercial building. Can also monitor the energy flow of a solar PV system.



Model	5kW Geyser Smart WiFi Switch & Energy Meter	Electricity Meter   Power Meter   Watt Meter
<b>Features &amp; Specifications</b>	<ul style="list-style-type: none"> <li>Can schedule on/off</li> <li>Max continuous Load 5kW with bursts of 63A</li> </ul>	<ul style="list-style-type: none"> <li>7 modes / functions</li> <li>Measures 1 x single phase circuit</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>Measures 1x single phase circuit. Shows V, A, W</li> </ul>	<ul style="list-style-type: none"> <li>Measures 5W to 3600W</li> </ul>
<b>Measurement Method</b>	<ul style="list-style-type: none"> <li>Inline 220V Power Meter</li> </ul>	<ul style="list-style-type: none"> <li>Inline 220V Power Meter</li> </ul>
<b>Monitoring APP Platform</b>	<ul style="list-style-type: none"> <li>Smart wifi control via EWELINK Mobile App</li> <li>Compatible with Amazon Alexa and Google Home</li> </ul>	N/A
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>Wi-Fi</li> </ul>	N/A
<b>Installation</b>	<ul style="list-style-type: none"> <li>35mm DIN Rail</li> </ul>	<ul style="list-style-type: none"> <li>Standard Three Point Plug</li> </ul>
<b>CT Clamp Diameter</b>	<ul style="list-style-type: none"> <li>Internal</li> </ul>	<ul style="list-style-type: none"> <li>Internal</li> </ul>
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>Remotely Manage and control geysers, swimming pool pumps or other electrical equipment</li> <li>Monitor energy usage.</li> <li>Create Smart Scenes using the EWELINK APP</li> </ul>	<ul style="list-style-type: none"> <li>Monitor electricity usage of a specific appliance.</li> <li>Track maximum power consumption level</li> <li>Track minimum power consumption level</li> <li>Show real-time power consumption.</li> </ul>



Model	IamMeter Bi-directional Single Phase WiFi Power Meter	IamMeter Bi-directional Three Phase WiFi Power Meter
<b>Features &amp; Specifications</b>	<ul style="list-style-type: none"> <li>Link multiple meters to one management account</li> <li>Measures 1 x single phase circuit</li> </ul>	<ul style="list-style-type: none"> <li>Link multiple meters to one management account</li> <li>Measures 3 phase or 3 x single phase circuits</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>Measures up to 33kW</li> </ul>	<ul style="list-style-type: none"> <li>Measures up to 33kW, 55kW or 110kW</li> </ul>
<b>Measurement Method</b>	<ul style="list-style-type: none"> <li>1 x Bidirectional 150A CT Clamp</li> </ul>	<ul style="list-style-type: none"> <li>Available with 3 x 150A, 250A or 500A Bidirectional CT Clamps</li> </ul>
<b>Monitoring APP Platform</b>	<ul style="list-style-type: none"> <li>Free cloud based monitoring via IAmMeter Mobile App and web portal. Open API to integrate into third party software.</li> </ul>	<ul style="list-style-type: none"> <li>Free cloud based monitoring via IAmMeter Mobile App and web portal. Open API to integrate into third party software.</li> </ul>
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>Wi-Fi</li> </ul>	<ul style="list-style-type: none"> <li>Wi-Fi</li> </ul>
<b>Installation</b>	<ul style="list-style-type: none"> <li>35mm DIN Rail</li> </ul>	<ul style="list-style-type: none"> <li>35mm DIN Rail</li> </ul>
<b>CT Clamp Diameter</b>	<ul style="list-style-type: none"> <li>16mm</li> </ul>	<ul style="list-style-type: none"> <li>16mm / 25mm / 35mm</li> </ul>
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>Correctly sizing an inverter, solar array and battery pack for a solar installation</li> <li>Accurately seeing when a device is using how much power</li> <li>Billing a tenant on a sub-distribution board for the electricity they use</li> <li>Monitoring and checking your overall own electricity bill, with the ability to go into detail monthly, daily, hourly</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring a three phase circuit</li> <li>Monitoring three separate single phase circuits</li> <li>Correctly sizing an inverter, solar array and battery pack for a solar installation</li> <li>Accurately seeing when a device is using how much power</li> <li>Billing a tenant on a sub-distribution board for the electricity they use</li> <li>Monitoring and checking your overall own electricity bill, with the ability to go into detail monthly, daily, hourly</li> </ul>



Your Trusted  
**Lithium Battery**  
Solutions Partner

## Our Team

### **Wynand Pretorius** CTO

Wynand Pretorius, an engineer at Red Pole Energy, is driven by a passion for finding innovative solutions to everyday challenges. He combines his engineering and business skills to create products and services that improve lives, no matter how small the impact. Wynand's passion is to build and be involved with ventures that improve the lives of people, are sustainable, flexible, and enrich the lives of many while providing decent livelihoods for all involved. His commitment to innovation and sustainability makes him a driving force at Red Pole Energy.

### **Charl Du Plessis** CFO

Charl Du Plessis is an experienced Chartered Accountant and supply chain expert dedicated to helping businesses thrive globally. With a strong finance background, he leads a dynamic team, ensuring businesses secure the right products at the best prices. Charl is known for his strategic sourcing expertise and unwavering commitment to excellence, making him the preferred partner for streamlined operations, enhanced profitability, and risk minimization.





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