

## Spark 277Ah Cell Li-ion Phosphate LiFePo4 LFP277 Battery

Spark Lithium is a family owned Australian business that specialises in Li-Phosphate battery technology. Together with our advanced battery management system our cells and modules can be configured to meet the needs of your products and applications, including energy storage (BESS), transportation (EVs) and back up power supply (UPS) systems.

### Performance

- High energy and power density
- Cycle life 3000+
- Excellent charge and discharge rate ( $\gg 1C$ )
- Temperature range (0 - 55°C)
- 100% depth of discharge
- Advanced BMS for individual cell protection

### Safety & Certification

- Lithium iron phosphate chemistry
- Cobalt free
- Excellent safety rating
- End of life recyclable
- 3 Year warranty (terms & conditions apply)
- UL Certified
- Pressure relief safety valve

### Customizable

- Modular design for flexible scalability
- Customizable voltage (LV & HV)
- Threaded terminal connections

### Applications



Industrial & Commercial Storage



Back up Power Supply (UPS)



On Grid Storage



Electrical vehicles



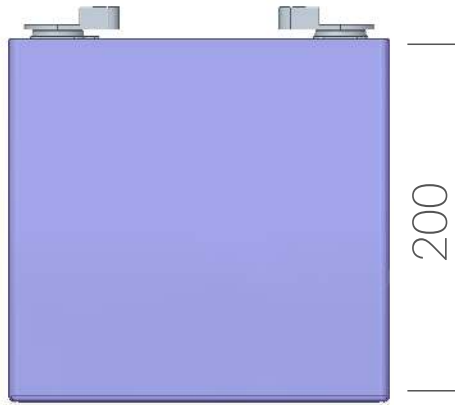
Off Grid Storage



Auxiliary Power:  
Road & Marine



## Spark 277Ah Cell Li-ion Phosphate LiFePo4 LFP277 Battery



### Technical Battery Specifications:

#### General

|                            |              |
|----------------------------|--------------|
| Nominal Capacity           | 277 Ah       |
| Nominal Voltage            | 3.2 V        |
| Nominal Energy             | 886 Wh       |
| Specific Energy            | 164 Wh/kg    |
| Energy Density             | 351 Wh/L     |
| Operating Voltage          | 2.5 - 3.65 V |
| Cell Impedance             | 0.4 mΩ       |
| Shipping/Storage Capacity  | 50% SOC      |
| Operating Temp (Charging)  | 0 - 55°C     |
| Operating Temp (Discharge) | -20 - 55°C   |
| Storage Temperature        | -30°C - 55°C |
| Self Discharge             | ≤3% /month   |

#### Mechanical

|        |        |
|--------|--------|
| Width  | 72 mm  |
| Height | 200 mm |
| Length | 175 mm |
| Weight | 5.4 kg |

#### Electrical [25°C]

|                           |        |
|---------------------------|--------|
| Maximum Discharge Voltage | 2.5 V  |
| Maximum Charging Voltage  | 3.65 V |
| Maximum Discharge         | 3 C    |
| Maximum Charge            | 1 C    |

## Spark 277Ah Cell Li-ion Phosphate LiFePo4 LFP277 Battery

Fig. 1 Cycle Life: 100% DOD at 25°C

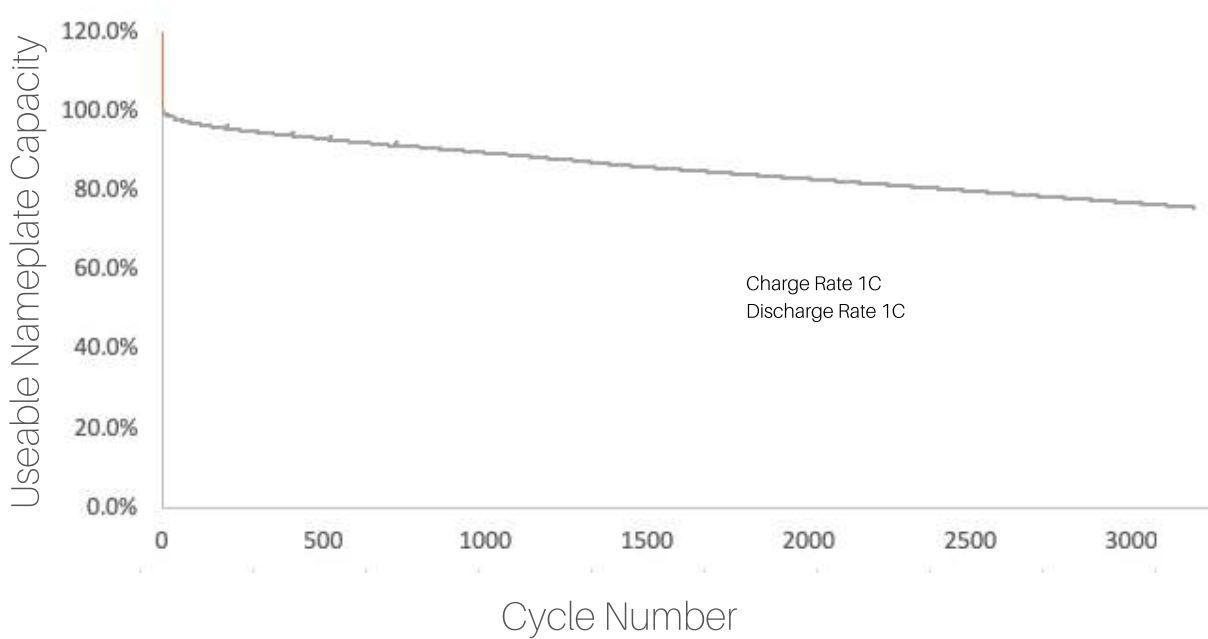


Fig. 2 Discharge curve: 1C discharge at 25°C

