48V 5.12kWh 19in LFP pack

Vaulta batteries offer a safe and reliable energy source that are suitable for various applications such as telecom, and on/off grid. Vaulta batteries are designed and made in Australia, and are the most environmentally friendly battery systems on the planet. Available for purchase or white labelling.

Safe
- Safety certified
- Multiple short circuit protection
- Cell level monitoring
- Thermal protection and cut-offs

Reliable
- 10 year calendar life
- Multiple charge/discharge profiles
- High energy density at packaged level (up to 145Wh/kg)
- Lithium Iron Phosphate – safer than NMC
- Repairable in the field

Circular
- Zero cobalt
- Vaulta Inside TM

Vaulta Inside means it's using Vaulta proprietary technology, which means it's designed for:
- *Local assembly*
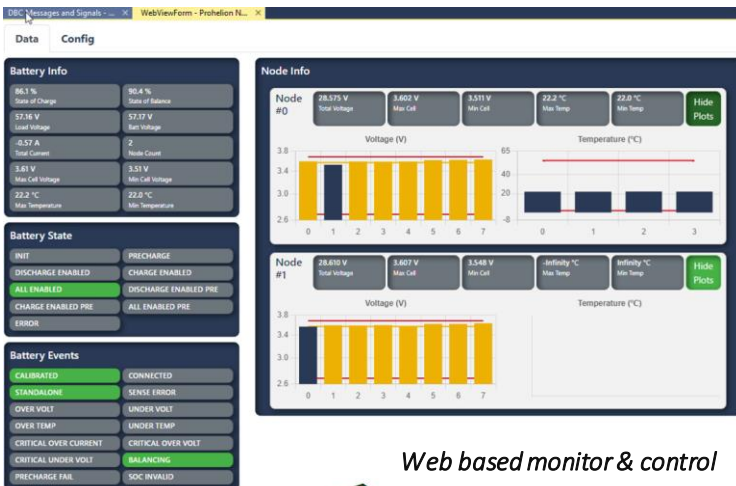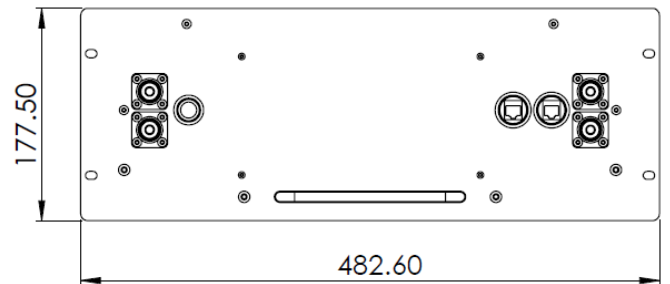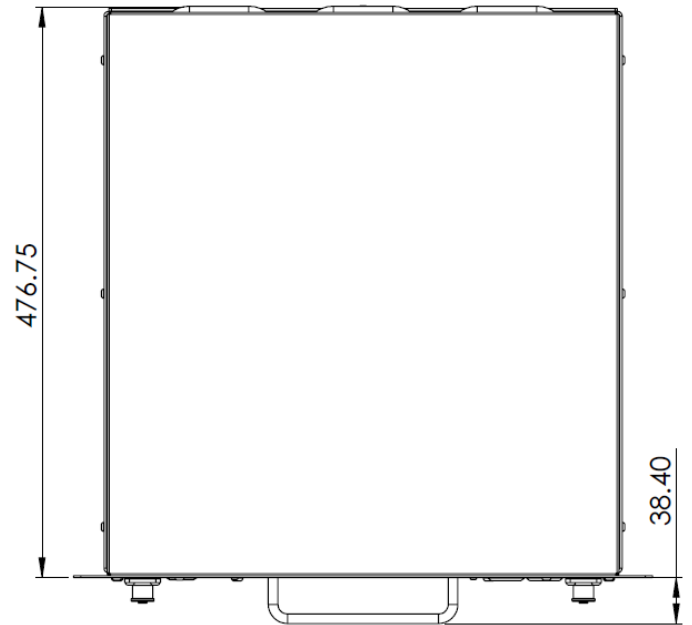- *Cell level repair*
- *Cell re-use*
- *Cell level recycling*

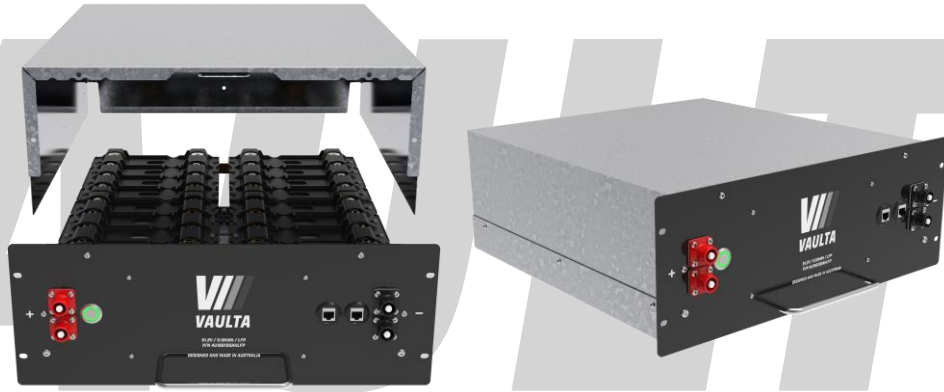| Specifications		
Nominal voltage (Vdc)	48 (51.2)	
Nominal capacity (kWh)	5.12	
Usable capacity (kWh)	4.86	
Dimensions (mm)	178mm (4U) x 482 (19in rack) x 487	
Weight (Kg)	<50	
Charge / Discharge Current (A)	Recommended	50A/50A (0.5C)
	Max continuous	100A/100A (1C)
Communication port	CANBUS	
String	16	
BMS balancing	660 mA	
Working temperature (°C) - charge	0 to 55	
Working temperature (°C) - discharge	-20 to 55	
Shelf temperature (°C)	25°C	
Calendar life	10 years @ 25°C	
Cycle life	4000 cycles @ 35°C, 80% DOD, 0.5C/0.5C (compression) 3000 cycles @ 35°C, 80% DOD, 1C/1C (compression)	
Planned certifications	UL1973/ASIEC62619/ UN38.3	

BMS FUNCTIONALITY

MECHANICALS

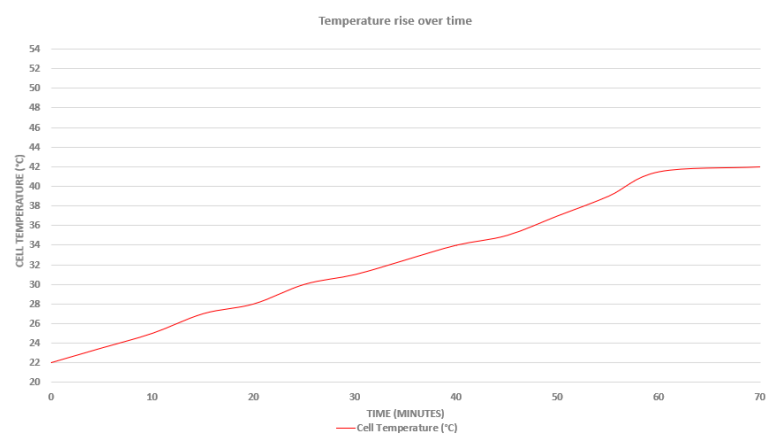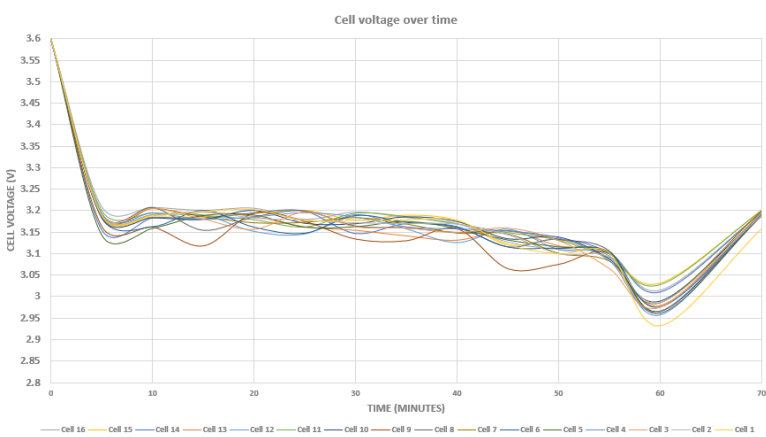|	
Manufactured in	Brisbane, Australia
Cell Chemistry	All - LiFePO4, Li-ion, LTO
Cell Voltage Sense Accuracy (mV)	1
Power Consumption Max (mA)	30
Power Consumption Sleep (µA)	4
Number of Temperature Sensors	8
Fused Cell Sense	Yes
Reverse Polarity Protection	Yes
Over-charge/discharge protection	Yes
Over-current, over/under temp protection	Yes
Short circuit protection	Yes
Coulomb Counter	Yes
CANBUS Communication	Yes

Web based monitor & control

1C DISCHARGE

Cell voltage over time

Temperature rise over time

1C CHARGE (DIRECTLY AFTER DISCHARGE)

Cell voltage over time

Temperature rise over time