

# Eco Series



Compatible with AC and DC coupled systems, our Australian made Eco Series batteries are ideal for individuals looking to establish an energy storage system with easy operation and maintenance.

Constructed with lithium ferro-phosphate (cobalt-free) cylindrical cells and an in-built BMS their simple design and modularity allows endless system integration options.

- ⚡ Fast Charging
- 🔧 Extensive Inverter Compatibility
- 🔌 Infinitely Scalable
- ⚙️ Master BMS in each Battery

## Eco4840P

Nominal DC Voltage	51.2V
Operational Voltage Window	40V to 57.6V
Nominal Capacity	4.0kWh (3.993) / 78Ah
Usable Capacity	4.0kWh (3.993)
Recommended Usable Capacity	3.2kWh (3.194)
Depth of Discharge	Up to 100%
Recommended Depth of Discharge	80% or less
Continuous Discharge C-Rate	0.5C (C2)
Continuous Discharge Current	39A
Continuous Discharge Power	2.0kW
Maximum Discharge (Limited by K-Curve Circuit Breaker) (*Refer to Install Manual for circuit breaker characteristics)	63A* (3.22kW)
Maximum Charge Current	63A
Warrantable Charge Current	39A
Warrantable Charge Power	2.0kW
Prospective Fault Current (1ms)	250A
Circuit Breaker (K-Curve)	2-Pole 63A 360VDC
Lithium Composition	Lithium Ferro Phosphate (LiFeP04 or LFP)
Operating Temperature Range	Charge: 0° to 55°C / Discharge -20° to 60°C
Ideal Operating Temperature Range	0 to 45°C
Operating Humidity	85% Non-condensating
BMS Over-Volt Cell Level Protection	3.9V/Cell
BMS Under-Volt Cell Level Protection	2.0V/Cell
BMS Over-Temp Cut Off	65°C
BMS Max Trip Current	200A
Self Discharge	14% Per Annum



Specifications correct at time of publication and are subject to change. Refer to website for latest information.

Altitude	< 2000m (seek manufacturers advice above 2000m)
Battery Mounting Options	Standard 19" Rack Mount / Horizontal / Vertical
Terminal Connections	Amphenol Surlok 100A Non-keyed
IP Rating	IP40
Efficiency	>96%
Cooling	Natural convection
Parallel Connection	Unlimited – Refer to Manufacturer
Series Connection	Not Permitted
Alarm Output	Normally Closed. Volt free, 200mA 60V Max
Communications	Alarm Output
Module Weight	43kg
Battery Dimensions	635mm D x 434mm W x 88mm H
Arc Flash Incident Energy IEm in Cal/cm2 (45cm)	0.36
Arc Flash Incident Energy AFB in cm	24.45
Certifications	Pending IEC: 62619:2017, UN38.3, EMC
Warranty	10 Years (conditions apply)

## Connected PCE Programming Requirements

Shutdown DC Voltage @0.5C	48.0V
Shutdown Voltage Recommended	50.2V
Recovery / Restart Voltage	52V
Continuous Charge Voltage	57.6V
Continuous Charge Transition	Battery is considered full after battery is absorbing less than 1% of maximum charge current after being held at specified charge voltage for 30minutes minimum.
Float Voltage Cyclic (Short Term Float) (Example Solar Application)	57.6V
Float Voltage Standby (Long Term Float) (Example UPS Application)	54.4V to 56V
Charge Current	39A
Peukert Exponent	1.02
Shutdown SoC Recommended	20%
Calibration to 100%	Every 7 days or more frequent where possible. (Ensures cell balancing is performed and keeps external SoC counter more accurate)

