

# Eco P Series Lithium Battery



- Maintenance Free
- Fast Charging
- High Efficiency
- Flexible Capacity Design
- Multiple Installation Options
- Free Warranty Returns
- Safe Lithium Option
- Master BMS in each Battery
- Compatible AC & DC Coupled Systems
- High Temperature Tolerance
- Mechanically Robust Cylindrical Cells
- Manufactured in Australia
- Local Support by the Manufacturer
- Direct Replacement for Lead Acid in most applications
- Increased Storage Efficiency

Eco4840P	
Nominal Capacity DC Voltage	51.2V
Nominal Capacity	4.0kWh (3.994) / 78Ah
Continuous Charge / Discharge C-Rate	0.5C (C2)
Continuous Charge / Discharge Current	39A (Refer to Eco 2RU Warranty Statement)
Maximum Current	63A (Limited by circuit breaker)
Battery Fault Current (1ms)	250A
Arc Flash Incident Energy IEm in Cal/cm (45cm)	0.36
Arc Flash Incident Energy AFB in cm2	24.45
Charge/Discharge Cycles approx.	2700@100% DoD / 5000@75% DoD / 10,000@50% DoD @25°C op. temp.
Operating Temperature Range	Charge: 0° to 55°C / Discharge -20° to 55°C
Operating Humidity (Non condensating)	85%
Altitude	Below 2000m
Battery Dimensions	635mm D x 434mm W x 88mm H
Battery Mounting Options	Standard 19" Rack Mount / Horizontal / Vertical
Terminal Connections	Amphenol Surlok 100A Non Keyed
Module Weight	43kg



Residential



Commercial



Industrial



Utilities and  
Telecom

Eco4840P	
Operational Voltage Window	40V to 58.4V
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
Max Trip Current	200A
Circuit Breaker	2-Pole 63A 360VDC (K Curve)
Self Discharge	14% Per Annum
Lithium Composition	Lithium Ferro Phosphate (LiFeP04 or LFP)
IP Rating	IP40
Round Trip Efficiency	>96%
Expected Life @25oC	Greater than 10 years when used as per warranty terms
Cooling	Natural convection
Parallel Stacking	Infinitely stackable - Seek Manufacturers advice
Serial Stacking	N/A
Alarm Output	Normally closed, Volt free, 1A maximum
Certifications	Pending IEC:62619:2017, UN38.3, EMC

Connected PCE Programming Requirements	
Eco4840P	
Shut Down SoC (Recommended)	20%
DC Volts Shut Down 0% Load	48.0V
DC Volts Shut Down 100% Load	46.0V
Recovery / Restart Voltage	52V
Continuous Charge Voltage (Per Warranty)	57.6V
Float Voltage Cyclic (Short Term Float) (Example Solar Application)	57.6V
Float Voltage Standby (Long Term Float) (Example UPS Application)	54.4V to 56V
Peukert Exponent	1.02
100% recharge (Recommended)	7 to 14 days to keep External SoC counter accurate
Continuous Discharge Current	39A
Continuous Charge Current	39A
Cable Size	Refer relevant manual or cable sizing standard
Warranty	Refer Warranty document for warranty duration, installation, usage and maintenance requirements
Note	In our efforts towards constant product enhancement this specification is subject to change at anytime without notice