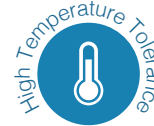


Eco P Series

Lithium Analogue Battery Specifications



EASY TO INSTALL RELIABLE POWER

With a 4.0kWh capacity the Eco P Series, a highly modular lithium battery, is designed to suit various applications ranging from residential, industrial, commercial and telecommunication.

Product Highlights:

- Free Warranty Returns
- Increased Storage Efficiency
- Flexible Capacity Design
- Multiple Install Options
- Safe Lithium Chemistry
- Compatible with AC & DC coupled Systems
- Mechanically Robust Cylindrical Cells
- Ongoing Local Support

	Eco4840P
Nominal DC Voltage	51.2V
Operational Voltage Window	40V to 58.4V
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 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 (LiFePO4 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
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 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
Terminal Connections		Amphenol Surlok 100A Non Keyed
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 & keeps external SoC counter more accurate)



Residential



Commercial



Industrial



Utilities and
Telecom

