

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 |

| Eco4840P | |
|---|--|
| 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, 1A maximum |
| 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

