

24V 70AH BATTERY MODULE

GEN4.3 NANO LITHIUM-TITANATE BATTERY MODULE

- Symmetrical, high C-rate charge/discharge capabilities
- Wide operating temperature range
- High cycle life
- Maintenance free operation
- Chemistry characteristics increase operational safety and provides higher levels of operational abuse tolerance than existing batteries



- 50 °C to + 65 °C cell temperature

UN 3480 compliant, Tested to UN

| PERFORMANCE CHARACTERISTICS | NOMINAL VALUES |
|--|-----------------------|
| Voltage range ¹ | 17.0 V – 27.5 V |
| Capacity (Minimum/Typical) ² | 65 Ah / 67.4 Ah |
| Typical discharge energy ² | 1,500 Wh |
| Peak power (discharge/charge) ³ | 20.0 kW / 33.2 kW |
| Energy density ² | 113 Wh/l |
| Power density (discharge/charge) ³ | 1,500 W/l / 2,480 W/l |
| Specific energy ² | 52.9 Wh/kg |
| Specific power (discharge/charge) ³ | 705 W/kg / 1,167 W/kg |
| Internal impedance during discharge (Typical) ³ | 4.3 mΩ |
| Internal impedance during charge (Typical) ³ | 4.5 mΩ |
| Max continuous discharge or charge current | 500 A |
| Max 10 sec Pulse discharge or charge current | 900 A |

¹ In lithium ion battery systems, the battery management system must enforce the voltage limits at the individual cell level.

Listed module voltages are approximate. ² 70A discharge, 25°C. Testing done using a rated capacity of 70Ah.

³ 10 sec pulse of 300A at 50% SOC, 25°C.

| LIFE CHARACTERISTICS | |
|--|---------------------------------|
| Cycle life at 2C charge and 2C discharge, 100% DOD, 25°C | >25,000 to 80% initial capacity |
| Cycle life at 2C charge and 2C discharge, 100% DOD, 55°C | >6,000 to 80% initial capacity |
| Calendar life at 25°C | 25 years |
| | |
| TEMPERATURE LIMITS | |

Operating and Storage temperature range⁴

| MODULE DIMENSIONS | |
|--|--------------------------|
| Length (L) x Width (W) x Height (H) | 279 mm x 158 mm x 303 mm |
| Length (L) x Width (W) x Height (H) (Include Module Terminals) | 279 mm x 158 mm x 333 mm |
| Weight | 28.4 kg |
| | |

TRANSPORTATION

Transportation Specifications

⁴Optimal storage temperature is 25 °C.