



Corvus Blue Marlin

The Blue Marlin is a unique ESS where Corvus Energy has combined its industry leading research with the development capabilities and knowledge gained from having the largest global installed base of Energy Storage Systems solutions. The result is a new cutting edge ESS with performance nearing a capacitor with improved energy density.

The Corvus Blue Marlin is designed for use in any application in need of short peaks of high power. It has industry-leading design with no manual connections, enhanced reliability and the highest level of safety.

Applications

- Offshore drilling platforms
- Jack-ups

- Semi-submersible rigs
- Drilling vessels

Features

- Highest C-rate in the industry, 550C peak
- Very long life and minimal self-discharge
- Designed for voltages up to 1094 VDC
- Low installation and commisioning time
- Low life cycle cost
- Enhanced reliability with contained power connections
- Flexible and modularised design
- Passive single cell Thermal Runaway protection
- Scalable capacity and voltage according to vessel requirements
- Industry-proven Battery Management System (BMS)
- Remote monitoring capabilities
- Enhanced EMI immunity design for maritime environments







Technical Specifications | Corvus Blue Marlin

Battery Management System

Control Interface

Performance Specifications	
C-Rate - Peak (Dicharge / Charge)	546C / 546C
C-Rate - Continuous (Discharge / Charge)	196C / 196C
System Specifications	
Single Module Size / Increments	109 Wh / 137 VDC
Single Pack Range	327-873 Wh / 410-1094 VDC
Max Power Gravimetric Density - Pack	298 W/kg (Continuous)
Max Power Volumetric Density - Pack	293 W/I (Continuous)
Example Pack - 8 Modules - 1094VDC	
Power, Peak and Continuous	497 kW and 179 kW
Energy	873 Wh
Voltage	Max: 1094 VDC Nom: 893 VDC Min: 634 VDC
Dimensions	Height: 1900 mm Width: 434 mm Depth 740 mm 600 kg
Safety Specifications	
Thermal Runaway Anti-Propagation	Passive cell-level thermal runaway isolation with exhaust gas system
Fire Suppression Recommended	Per SOLAS, class and Corvus recommendation
Short Circuit Protection	Fuses included
Emergency Stop Circuit	Hard-wired
Ground Fault Detection	Integrated
Disconnect Circuit	Over Voltage, Under Voltage, Module Internal Leak
Disconnect Switchgear Rating	Full load
General Specifications	
Class Compliance	DNV
Type Approval	Pending
Ingress Protection	System: IP44
Cooling	Liquid Cooling
Vibration and Shock	DNVGL-CG-0339, IEC 60068-2-6
EMC	IEC 61000-4, IEC 60945-9, CISPR16-2-1
Transport	UN3508
Environmental Specifications	
Temperature	DNVGL-CG-0339, Class B
Humidity	DNVGL-CG-0339, Class B
Ambient Temperature	5 - 45 degC
Short Circuit Capacity	
BOL	5°C - 2.3kA, 25°C - 5.5kA, 45°C - 6.4kA
EOL	5°C - 2.1kA, 25°C - 5kA, 45°C - 5.8kA
Battery Management System	
Battery Management System	Corvus Gen. 4 2021-04-

Corvus Gen. 4

Modbus TCP