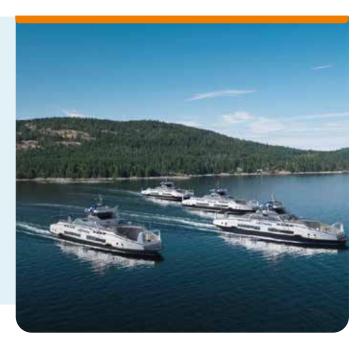
# **Corvus Dolphin NxtGen - Power**

The Corvus Dolphin NxtGen marine energy storage system power variation is designed for applications that require a high-power battery system where lightweight is essential.

The Corvus Dolphin NxtGen Power offers high power density, reasonable energy density and the highest level of marine battery safety The space-efficient, rack-free design enables flexible installation configurations to maximize utilisation of available battery room space.



## **Applications**

Dolphin NxtGen - Power is ideal for ships were high C-rate requirements and lightweight is essential.

## **Typical Vessel Types:**

- Ferries
- High Speed Fast Ferries
- Harbor Tugs
- Offshore Vessels
- Offshore Wind Vessels
- Crew Transfer Vessels

### **Features**

- Suitable for rapid charging and discharging
- Low weight
- Designed for voltages up to 1200 VDC
- Flexible installation
- Low life cycle cost
- Easy and safe plug and play connections
- Very flexible and modularized 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

# **Corvus Energy Safety Innovations**

### Passive Single-cell-level Thermal Runaway (TR) Isolation

- · True cell-level thermal runaway isolation
- TR does not propagate to neighbouring cells
- · Isolation NOT dependant on active cooling



# **Technical Specifications | Corvus Dolphin NxtGen ESS - Power**

### **Performance Specifications**

C-Rate - Peak (Discharge / Charge) 2,5 CC for 10 seconds C-Rate - Continuous (Discharge / Charge) 1,5 CP / 1,5 CP

### **System Specifications**

Battery Cell Chemistry Lithium ion NCA
Single Module Size / Increments 6,56 kWh / 50 VDC

Single Module Capacity 152 Ah

Module Dimensions 660 x 500 x 100 mm (l x w x h)

Module Weight 46.5 kg
Max Gravimetric Density - **String** 127 Wh/kg
Max Volumetric Density - **String** 155 Wh/l

### **Safety Specifications**

Thermal Runaway Anti-Propagation Passive cell-level thermal runaway isolation

External Fire Suppression Per SOLAS, class and Corvus recommendation

Disconnect Protection Hardware-based fail-safe overcharge protection

Short Circuit Protection Integrated cell-level fusing

Emergency Stop Circuit Hard-wired
Ground Fault Detection Integral Disconnect Circutry Rating <sup>1</sup> Full load

#### **General Specifications**

Class Compliance DNV Type Approval DNV $^2$  Ingress Protection IP66 $^3$  Cooling Liquid

2025-02-24



<sup>&</sup>lt;sup>1</sup> not compliant with IEC 60947-1

<sup>&</sup>lt;sup>2</sup> Pending

<sup>&</sup>lt;sup>3</sup> LV AC compartment of SIB is IP56