

NAVIGATOR 46S NMC

Advanced Maritime Batteries

Designed for applications where maximum energy density and operational flexibility are critical.



OPERATIONAL ADVANTAGES



HIGH ENERGY DENSITY
185.6 Wh/kg gravimetric energy density (Nominal energy basis)



ULTRA-LIGHTWEIGHT
122 kg module weight



RACK-FREE STACKABLE DESIGN
Flexible integration without a conventional rack



ON-BOARD MAINTAINABLE
Modules exchangeable by trained professionals



OPTIONAL LIQUID COOLING
For demanding thermal profiles



ANY-ANGLE DESIGN
Retrofit-ready for constrained vessels

ELECTRICAL PERFORMANCE

Cell Technology	NMC
Nominal Voltage	170.2 V
Voltage Range	128.8 - 195.5 V
Nominal Energy	19.7 kWh
Gross Energy	22.6 kWh
Gravimetric Energy Density	185.6 Wh/kg gross basis
Volumetric Energy Density	276.2 Wh/l gross basis
C- Rate (Continuous)	1.5C air-cooled / 3C liquid-cooled
C- Rate (Peak 30s)	2C air-cooled / 3C liquid-cooled

PHYSICAL CHARACTERISTICS

Weight	122 kg
Dimensions (W x D x H)	624x870x151 mm
Volume	82.0 l
Enclosed Material	AZ31B
Protection Class	IP67

OPERATIONAL INTEGRATION

Design	Rack-free, stackable
Configuration	1 to 6 modules in series
Cooling	Natural convection or optional liquid cooling
Mounting	Flexible vessel integration
Maintenance	Module exchange by trained professionals - full battery cell swap on-board

MARITIME COMPLIANCE

Ingress Protection	IP67
Operating Temperature	-20 °C to +55 °C
Storage Temperature	-30 °C to +60 °C
Fire Suppression	Aerosol systems
Documented Standards	DNV Rules, ES-TRIN, IEC 62619, IEC 62620, UN 38.3, DNV CG-0339

CONFIGURATION EXAMPLES

Modules in Series	Nominal Voltage	Nominal Energy	Usable Energy (80% DoD)
1	170.2 V	19.7 kWh	15.8 kWh
2	340.4 V	39.4 kWh	31.5 kWh
3	510.6 V	59.1 kWh	47.3 kWh
4	680.8 V	78.8 kWh	63.0 kWh
5	851.0 V	98.5 kWh	78.8 kWh
6	1021.2 V	118.2 kWh	94.6 kWh



MAXIMUM ENERGY. MINIMUM COMPROMISE.

Navigator delivers high industry-leading energy density in a compact, maintainable design.



BUILT FOR MARINE ENVIRONMENTS



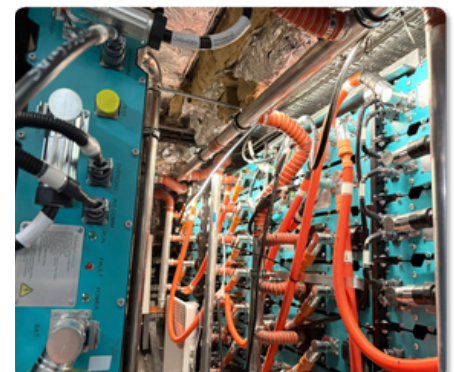
VIBRATION RESISTENT



FAST COMMISSIONING



DNV CERTIFICATION IN PROGRESS



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