# QUEST® - ENERGY STORAGE

# THE FRONTRUNNER IN CLEAN ENERGY







# QUEST ® - QUADRO ENERGY STORAGE TECHNOLOGY

# FIREPROOF LITHIUM BATTERY SYSTEM

- 3C RMS continuous discharge\*
- 10C peak discharge\*
- 3C peak charge\*
- Cell liquid cooling
- Thermal runaway containment technology
- Local service

EXCELLENCE IN ELECTRIC

#### DESIGNED FOR MEGAWATT (MW) SCALE MARINE SYSTEMS

The next generation in commercial marine lithium energy storage has been engineered to reduce emissions, save fuel, operating costs and meet commercial marine requirements. By understanding our customers needs and using the latest technology we can provide the safest MW scale in the world without compromising rapid payback.

- FLEXIBLE SYSTEM
- TAILOR MADE
- ADVANCED SAFETY FEATURES
- REDUCED RISK OF THERMAL RUNAWAY
- SUITABLE FOR BOTH NEWBUILDINGS AND CONVERSIONS
- EASY TO INSTALL

### **NEW BUILDINGS**

Let us help you design your next hybrid electric propulsion system at an early stage and you will achieve significant reductions in fuel costs, maintenance and emissions. With our QUEST® technology on board you will be contributing to a cleaner future.

## **CONVERSIONS AND UPGRADES**

By using our container solutions for energy storage, most vessels can be converted or upgraded. With our know-how and experience we can help you find the best solution for your vessel.

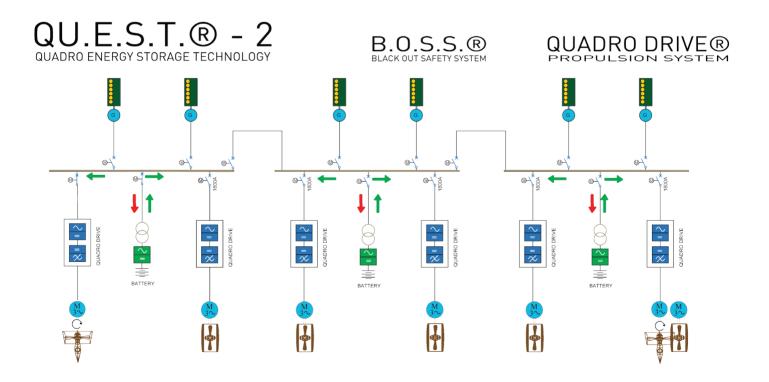
### **ADVANTAGES**

- Reduce fuel consumption
- Improve diesel engine efficiency
- Improve vessel performance
- Reduce engine running time
- Reduce maintenance costs
- Increase redundancy
- Less emissions including NOX, SOX, CO2, etc
- Improve working environment

\* C-rate is the rate at which the battery is charged/discharged relative to it's maximum capacity. A 1C rate means that the battery may charge/discharge the entire battery in 1 hour. 2C = 1/2 hour etc.

READ ONLINE





QUADRO DRIVE®

SPECIFICATIONS	
Features	
C Rate RMS	3C
BMS (Battery Management System)	MegaWatt ++
IMS (INformation Management System)	API Interface
Communication interface	Modbus TCP
Engineered Design Life	5/10 years
Warranty	Full Design Life
CoolCell™ Liquid Cooling	Y
Cell	Lithium Ion NMC
TCP Ultra fast internal comms	Υ
Thermal-Stop™ Thermal Runaway Protection	Υ
E-Vent™ Safety Venting System	Y
Cycle Life	>8000 @ 80% DOD
Operating Termperature (active heating/cooling)	-40° to 60° C
Series Configurable	Y
Remote Active Monitoring	Y
OnPoint Active Programming	Y
Parallel Configurable	Unlimited
Single Battery Unit	
Dimensions	390mm x 325mm x 575mm
Weight	89kg
kWh	6.5kWh
Ah	75Ah
Voltage Range	77-100VDC
Nominal Voltage	88.8VDC
RMS Continuous Current	225A
Max discharge	450A
Max charge	225A
Connectors	IP67
Terminal Isolation at Module	Contactor
Thermal-Stop™ Thermal Runaway Protection	Y
Self Discharge Rate/month	2%
Round Trip Efficiency (at 1C)	99%
Series String (10 single battery units)	
Dimensions (including racking)	2.45m x 0.93m x 0.6m
Weight	1000kg
kWH	65kWh
Ah	75Ah
Voltage Range	770-1000VDC
Nominal Voltage	888VDC
Max Current	450A
Electrical Isolation at DC Bus	Breaker
Integrated Racking System	Included

Subject to change without notice.