

LIVOLTEK

Power Your Home with Green Energy

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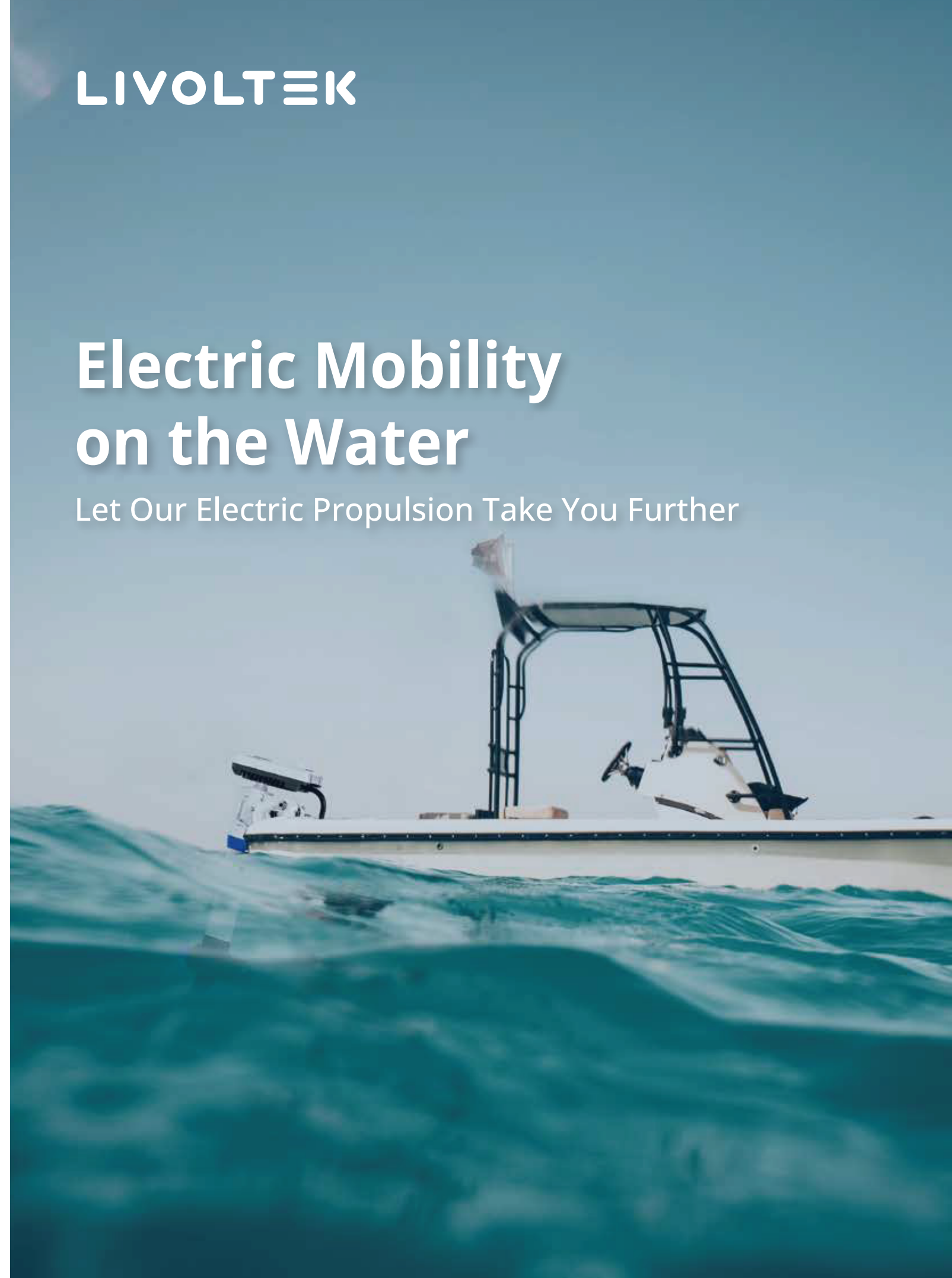
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LIVOLTEK

Electric Mobility on the Water

Let Our Electric Propulsion Take You Further





About Us

As a member of Hexing Group, LIVOLTEK is one of the leading solar product manufacturers and renewable energy solution providers worldwide.

LIVOLTEK concentrates on green energy innovation. We are dedicated to giving our customers better quality, more effective, and more enjoyable energy experiences.

With offices and warehouses all over the world and the most experienced local technical team, LIVOLTEK is able to provide our global customers with high-quality solar goods and one-stop energy solutions by faster local delivery and superior local support.



Global Employees

3000+



Company History

31 years



Revenue in 2022

5.3 billion



Business Network

90+

Dolphin series

Power : 1~7 kW
Eq. Gasoline : 3~11HP
BOAT LOA : <15 m



Pod Drive series

Power : 3~7 kW
Eq. Oil Engine : 6~11 HP
BOAT LOA : <15 m



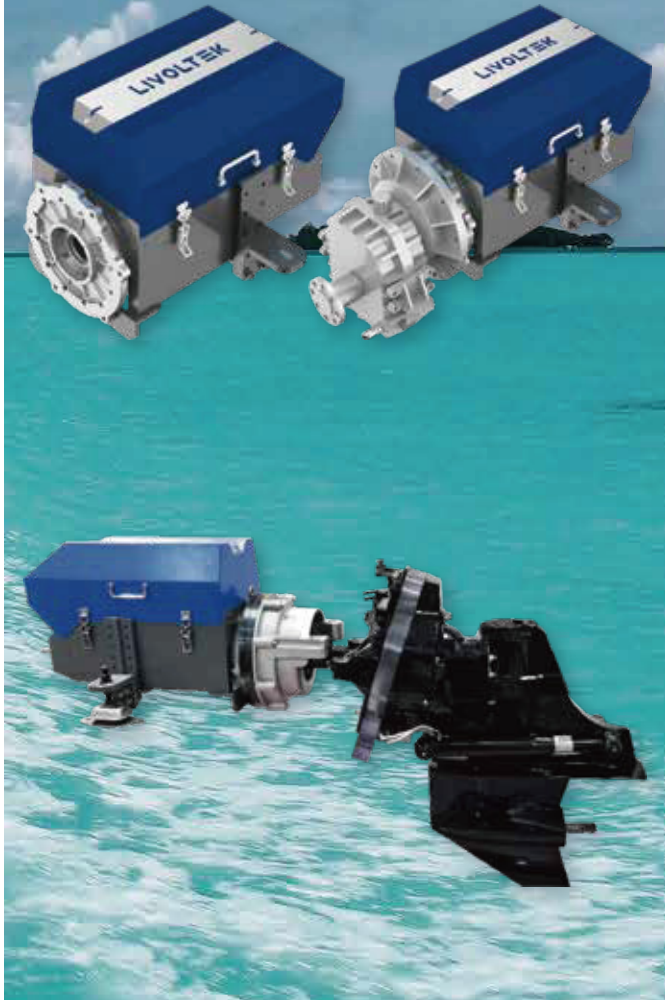
Sea-Elf series

Power : 8~55 kW
Eq. Gasoline : 10~75 HP
BOAT LOA : <30 m



E-engine series

Power : 49~90 kW
Eq. Oil Engine : 70~115 HP
BOAT LOA : <35 m



Dolphin series to be suitable for small fishing boats, dinghies, day sailing boats and cruising sailboats to provide efficient and clean power, suitable for seawater and freshwater.



Dolphin series

TEST DATA

3.0 kW electric outboard endurance test results

Calm water test data			
Power (Watt)	Speed (kph)	Running Time (h)	Total cruising range (km)
300	6	15.36	92.16
550	7.2	8.38	60.34
1000	8.5	4.61	39.18
1500	9.8	3.07	30.1
2000	11.7	2.30	26.91
2500	15	1.84	27.6
3000	16.6	1.54	25.56

*Performance data based on a 3.8m long aluminum boat operated by one person, powered by an EDP003L equipped with 2 sets of BLF-B5150 batteries (2.56kWh each, discharged to 10% remaining power) in calm lake water.

6.9 kW electric outboard endurance test results

Calm water test data			
Power (Watt)	Speed (kph)	Running Time (h)	Total cruising range (km)
500	6.5	18.43	119.79
1000	8.4	9.22	77.45
2000	11.6	4.61	53.48
3000	14.6	3.07	44.82
4000	19.1	2.3	43.93
5000	21.8	1.84	40.11
6000	24.5	1.54	37.73
6900	26.3	1.34	35.24

*Performance data are based on a 3.8m long aluminum boat operated by one person, powered by an EDP007L equipped with 4 sets of BLF-B5150 batteries (2.56kWh each, discharged to 10% remaining power) in calm lake water.

Electric Propulsion System

- 1 Tiller
- 2 Battery
- 3 Outboard
- 4 Boat IoT



Electric Propulsion System

- 1 Tiller
- 2 Outboard
- 3 Battery
- 4 Solar (optional)
- 5 Main Power Switch
- 6 Boat IoT



- EDP003L/S
Comparable petrol
6HP
- EDP007L/S
Comparable petrol
11HP
- Stern Steering

Electric Propulsion System

- 1

Remote Control
- 2

Outboard
- 3

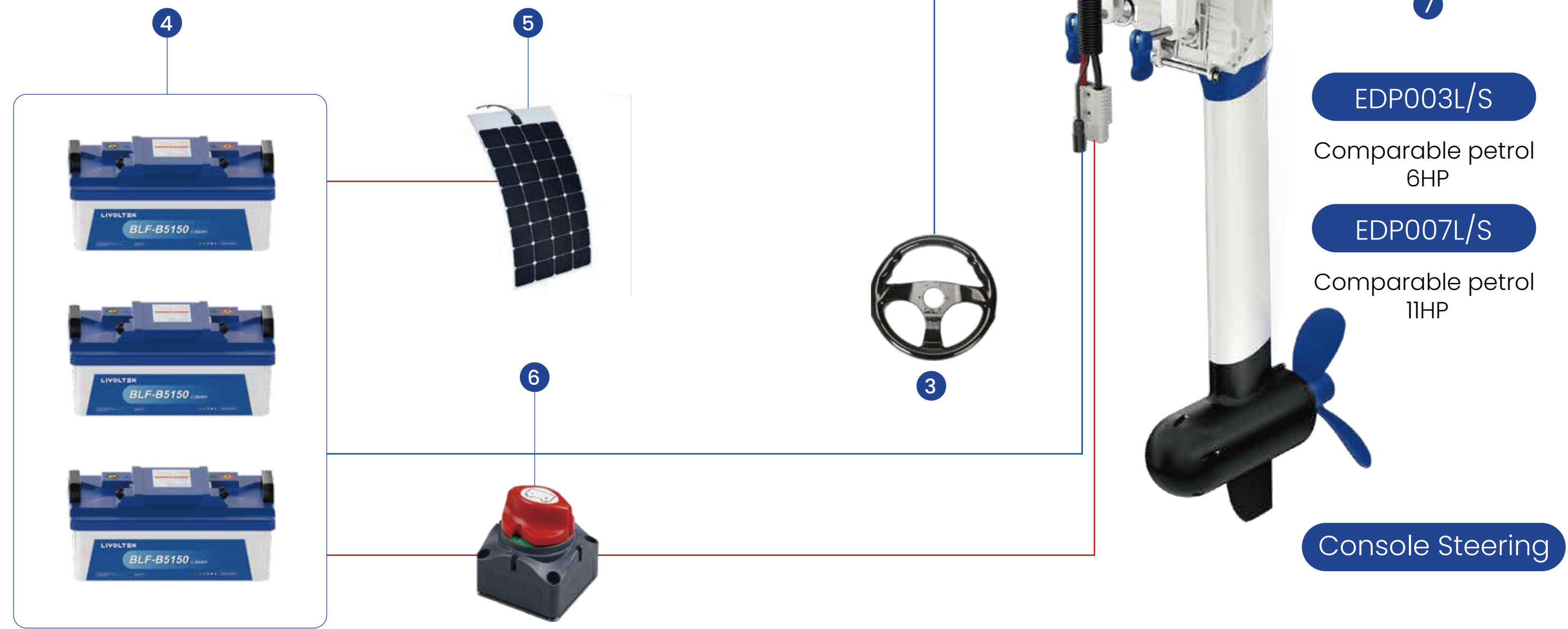
Steering Wheel
- 4

Battery
- 5

Solar (optional)
- 6

Main Power Switch
- 7

Boat IoT



EDP001L/S

Comparable petrol
3HP

EDP003L/S

Comparable petrol
6HP

EDP007L/S

Comparable petrol
11HP

Remote Control

Tiller

Specifications

Model	EDP001L/S	EDP003L/S	EDP007L/S
Input power in watts	1000	3000	6900
Propulsion power in watts	490	1560	3480
Comparable petrol outboards (propulsive power) in HP	3	6	11
Maximum overall efficiency	49%	52%	58%
Static thrust in N	300	640	1450
Rated voltage in VDC	48	48	48
Input voltage In VDC	36~60	36~60	36~60
Motor weight without battery in kg	11.5 (L) /10.7(S)	21.0 (L) /20.4(S)	28.5(L)/27.8(S)
Motor weight with battery in kg	19.5(L)/18.7(S)	-	-
Whether to support third-party batteries	✓	✓	✓
Shaft length in mm	762 (L) /635 (S)	762 (L) /635 (S)	762 (L) /635 (S)
Propeller options in mm (diameter xpitch)	256×182	260x190	295x303
Maximum propeller speed in rpm	1250	1750	1500
Control	Tiller/ Remote Control	Tiller/ Remote Control	Tiller/ Remote Control
Cooling method	Natural cooling	Natural cooling	Natural cooling
Whether to support App	✓	✓	✓
Whether to support reverse charging	✓	✓	✓
Trim device	Manual, 70°	Manual, 60°	Manual, 60°
Tilt Angle	0°, 7°, 14°, 21°	0°, 5°, 10°, 15°	0°, 5°, 10°, 15°
Stepless forward/reverse drive	✓	✓	✓
Motor type	Permanent magnet synchronous motor		

Electric Propulsion System

Pod Drive series



Pod drives are direct drive and minimal maintenance electric motors used on sailboats and small boats. They save space and maximize your cabin space with no noise on boat.

- 1

Pod Drive
- 2

External Motor Drive Controller
- 3

Remote Control
- 4

Hydraulic Reverse Charging
- 5

Lithium Iron Phosphate Battery
- 6

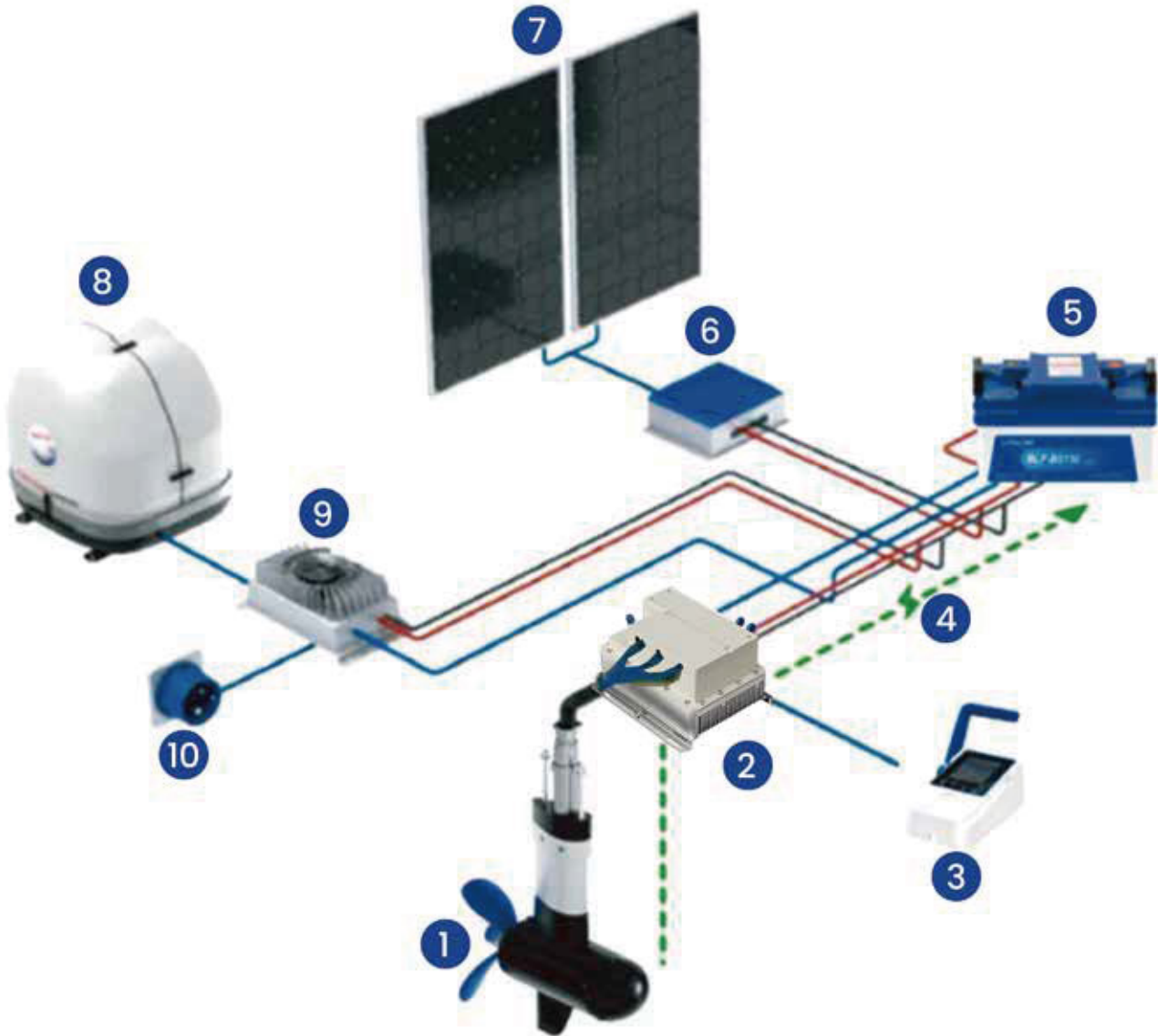
MPPT
- 7

Solar Panels
- 8

Generator
- 9

Battery Charger
- 10

Shore Power Connection





Comparable petrol
6HP



Half speed running time/4.6h

4.6h

Full speed running time/1.5h

1.5h



EPD007N
Comparable petrol
11HP



Half speed running time/4.6h

4.6h

Full speed running time/1.3h

1.3h

Specifications

Model	EPD003N	EPD007N
Input power in watts	3000	6900
Propulsion power in watts	1560	3480
Comparable petrol outboards (propulsive power) in HP	6	11
Maximum overall efficiency	52%	58%
Static thrust in N	640	1450
Weight in kg	15.4	23.4
Propeller options in mm(diameter ×pitch)	260×190	295×303
Motor type	Permanent magnet synchronous motor	Permanent magnet synchronous motor
Whether to support reverse charging	✓	✓
Control	Top mount Control	Top mount Control
Whether to support App	✓	✓

Experience green and strong power mobility on the water.

Equipped with high-performance permanent magnet synchronous motor, with high energy density and lighter weight.

Water cooled motor FOC controller with high efficiency and reliable operation

The panel method for forward design of propellers has been optimized through long-term CFD analysis, resulting in higher efficiency and fewer bubbles



Sea-Elf series to be suitable for fishing boats, engineering boats, motor boats, sailboats, cruise ships, etc. of 5 tons and above, suitable for fresh water and seawater.



Experience Green and Strong Power mobility on the water.

1 Outboard

2 Steering Wheel

3 Remote Control

4 Shore Power Management Unit

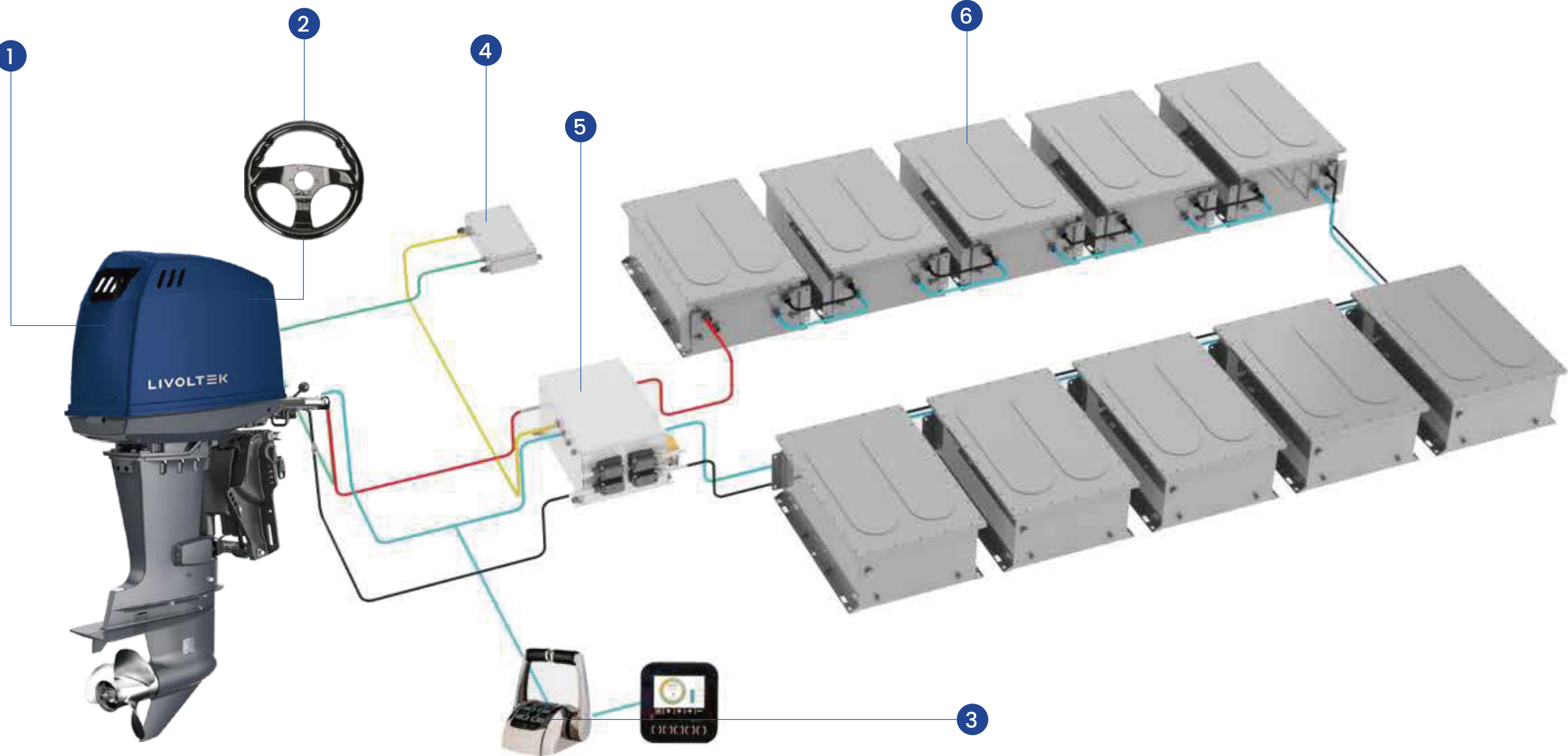
5 Power Distribution Unit

6 Battery

 Can meet all-day patrol needs at economical speed

 Ship networking function supports remote background management

 Smart charging





ESE008

Comparable petrol
10HP



ESE015

Comparable petrol
20HP



ESE022

Comparable petrol
30HP



ESE029

Comparable petrol
40HP



ESE055

Comparable petrol
75HP

Specifications

Model	ESE008	ESE015	ESE022
Input power in watts	8000	15000	22000
Rated Speed in rpm	4500	4500	4000
Max Continuous Discharging Current in A	200	200	180
Rated Voltage in VDC	48	98	144
Comparable petrol outboards (propulsive power) in HP	10	20	30
Input voltage range in VDC	36-60	50-130	70-180
Motor weight without battery in kg	60	60	95
Whether to support third-party batteries	✓	✓	✓
Maximum propeller speed in rpm	2400	2400	2000
Propeller options in inch	3-9 1/4*9	3-9 1/4*9	3-11 1/8*13
(number of blades - diameter * pitch) Whether to support App	✓	✓	✓

Specifications

Model	ESE029	ESE055
Input power in watts	29000	55000
Rated Speed in rpm	5500	4000
Max Continuous Discharging Current in A	220	85
Rated Voltage in VDC	144	550
Comparable petrol outboards (propulsive power) in HP	40	75
Input voltage range in VDC	70-180	250-750
Motor weight without battery in kg	95	165
Whether to support third-party batteries	✓	✓
Maximum propeller speed in rpm	2750	2000
Propeller options in inch	3-11 1/8*13	3-13 1/2*15
(number of blades - diameter * pitch) Whether to support App	✓	✓

E-engine Series to be suitable for large sailing boats and motor boats between 60 to 100 feet (18 to 35m), fast motor boats, etc.,with a full displacement of up to 200 tons.



Yachts



Work Boats



Cruisers



Water Buses



Canal Boats

E-engine series



Zero Emissions



Zero Pollution



Low Noise



More Economical

1

Permanent Magnet Synchronous Water-cooled Propulsion Motor

2

Battery

3

Console Station

4

Steering Wheel

5

Remote Control

6

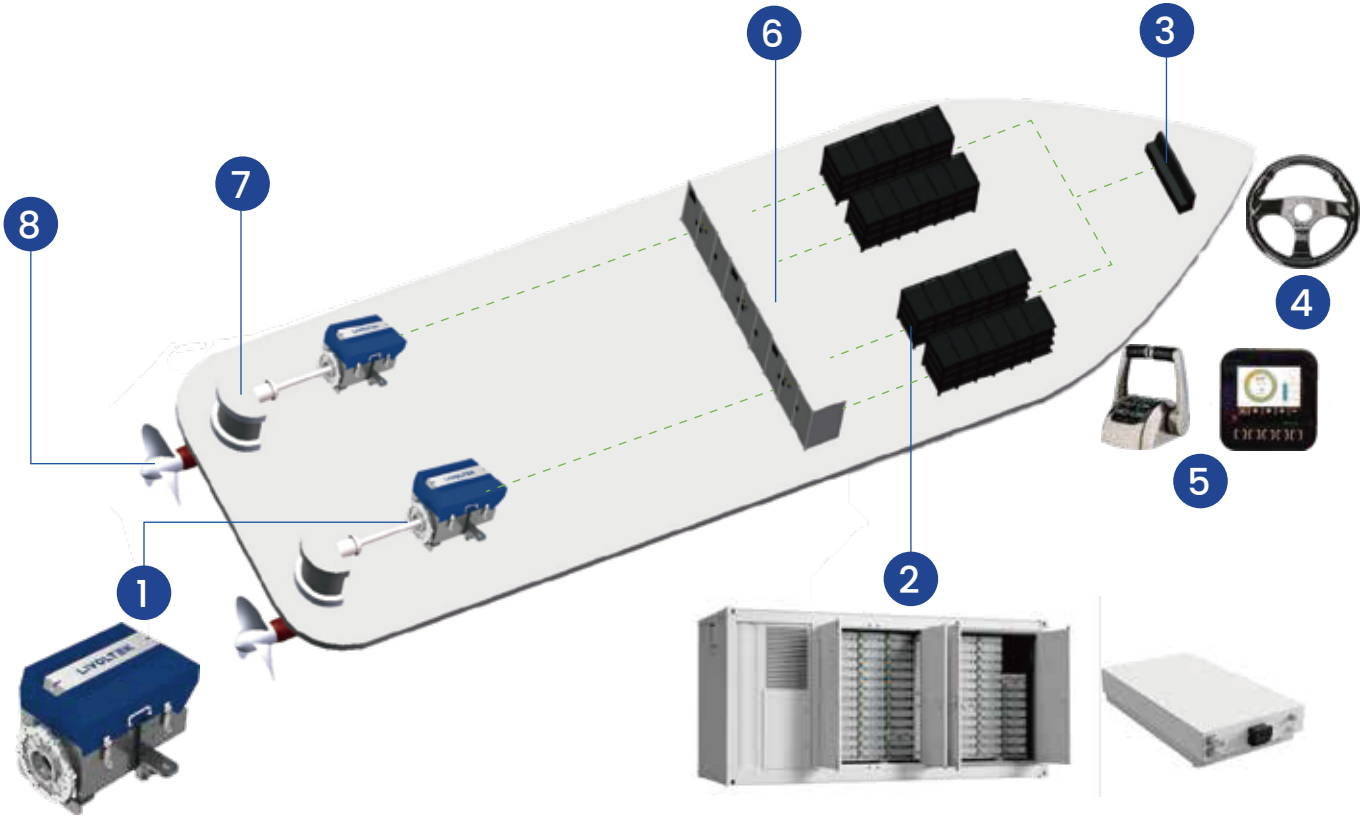
Power Distribution Unit

7

Gear Box

8

Propeller



Cleaner,Strong,Power,Quieter,More Economical



EEE049



EEE065



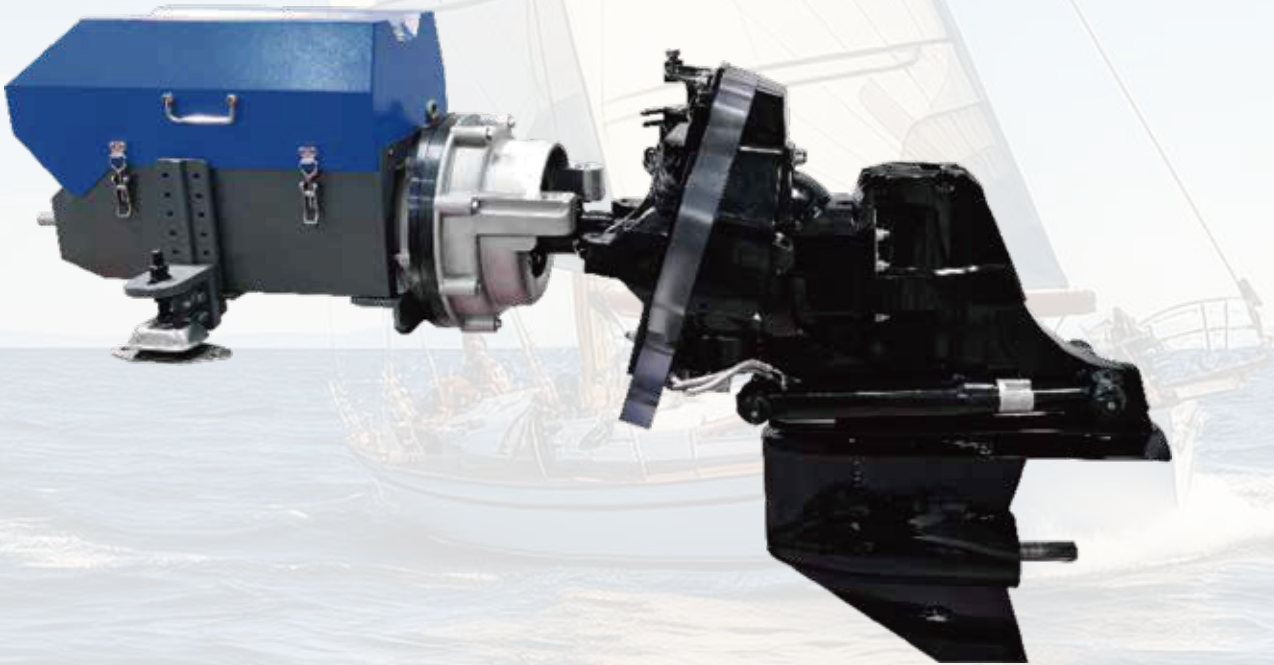
EEE090

Specifications

Model	EEE049	EEE065	EEE090
Input voltage in VDC	350~750	450~750	450~750
Rated voltage in VDC	350/550	550	550
Rated current in A	150/110	120	145
Rated speed in rpm	3400/3000	3600	4000
Input power in watts in kW	49	65	90
Rated torque in N·M	138/156	170	215
Insulation level	H	H	H
Work quota	S9	S9	S9
Motor weight without battery in kg	106±5	120±5	120±5



E-engine + Gearbox



E-engine + Stern Driver Engine



Specifications

Model	BLF-B5150
Chemical Composition	Lithium Iron Phosphate
Rated Voltage	51.2VDC
Capacity	2560Wh
Cycle Lifetime	3000cycles
Weight in kg	25
Dimension in mm	387*333*261mm
Final Charging Voltage	57.6VDC
Maximum Continuous Discharge Current	50A
Charging Time	1.25h
Whether to Support Concatenation	×
Parallel Requirements	Supports up to 5 parallel connections
Charging Temperature	0~55℃
Discharge Temperature	-10~60℃
Communication Function	CAN+RS485
Transportation Classification	Class 9 dangerous goods
Adaptation Type	EPD003N、EDP003L/S、EPD007N、EDP007L/S

- 

High Security

Built-in functional battery management system provides users with multiple safety protections
- 

High Energy Density

The energy density is 3 times that of lead-acid batteries, and the weight and volume only account for 1/3 of lead-acid batteries with the same capacity.
- 

Real-time Battery Monitoring

The SOC displays current voltage, current, alarm and other information, allowing users to easily understand the battery working status.



When multiple boxes are used in series, the rated voltage can reach up to 691.2V and the rated discharge current is 150A. The maximum current can reach 250A, and the stored power can reach 430KWh. The capacity can be easily expanded according to customer needs.



76.8V 150A/175Ah battery box

Continuous charging current	0.5C
Continuous discharge current	1C
Battery pack quality	≈115kg
Power	11.52kwh
Size	710*494*260mm



The energy density is 3 times that of lead-acid batteries, and the weight and volume only account for 1/3 of lead-acid batteries with the same capacity.



Protection grade IP67, barrier-free use under harsh working conditions



Operating system



Tiller Handle



Remote Control



Remote Control



Dual Remote Control



Digital Display

Offers real-time monitoring of the power, remaining runtime, battery level, voltage, etc.



Magnetic Kill Switch

Works as an emergency stop key for electric outboard motors. Keeps you safe on the boat.



Electric Start

Press the button and you're ready to go. Saves your trouble pulling the cord to start.



Smooth Throttle Changing

Designed with excellent throttle response and clear throttle hand feel.

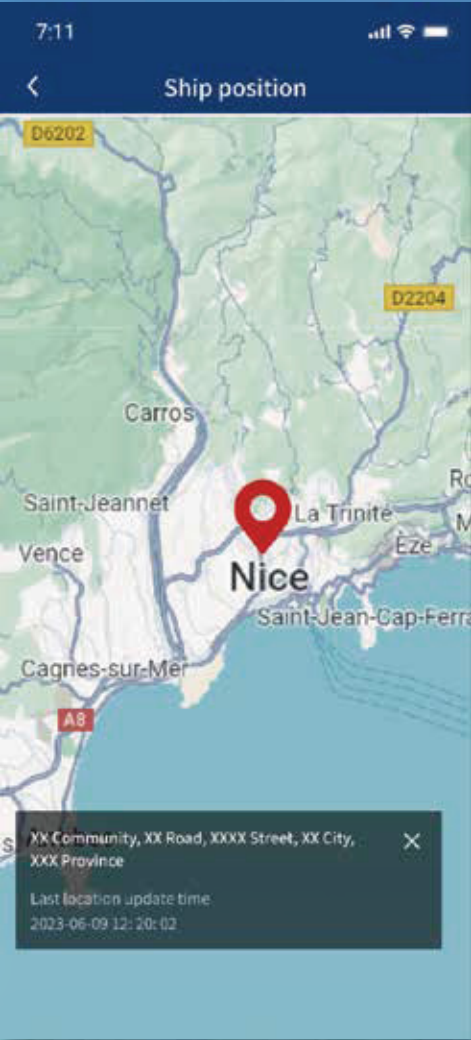
Propeller types



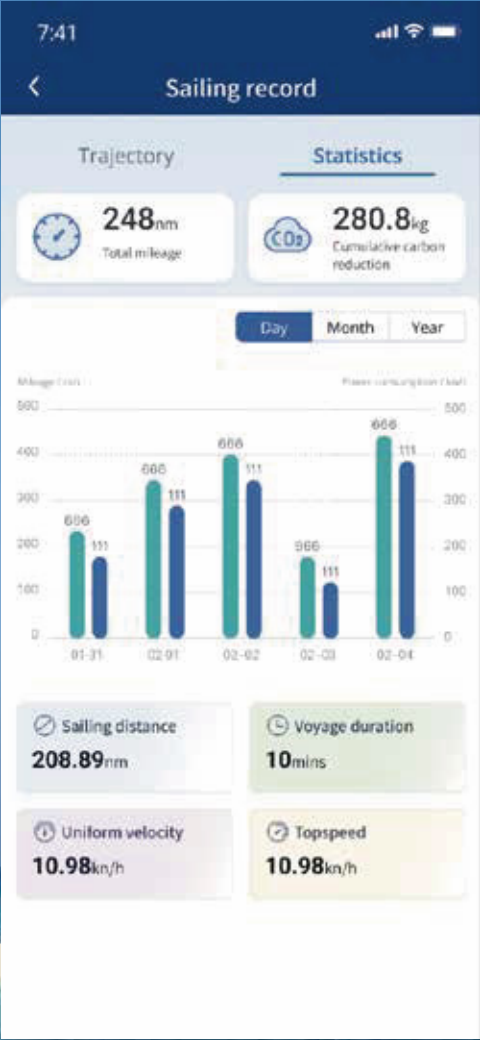
Compatible model	EDP003L/S, EPD003N
Diameter/mm	260
Pitch/mm	190



Compatible model	EDP007L/S, EPD007N
Diameter/mm	295
Pitch/mm	303



Ship Position



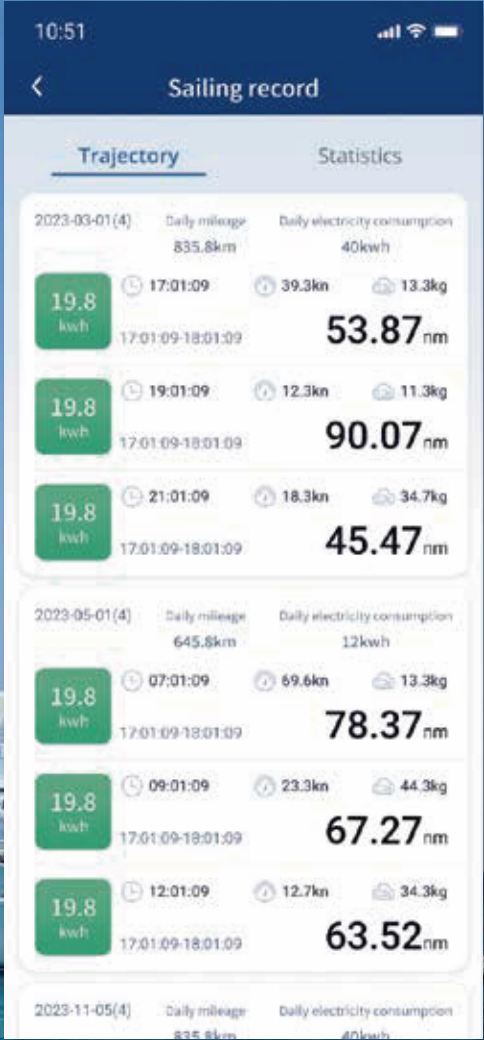
Voyage Record Statistics



Home Page



Trajectory



Voyage Record Track

 Real-time Display of Data:
Real-time display of various information, including location, speed, battery power, remaining sailing time/distance etc.

 Sailing Track:
Displays sailing time, sailing distance, maximum speed and other information.

 Voyage Log:
Records of multiple voyages, traceability of voyages.

 Ship Position:
Real-time tracking of new ship positions.