

2023 MEETS THE FUTURE



Going **ELECTRIC**
with ELECTRINE

Pure Electric & Hybrid Propulsion System



*Your Ride Finally
Meets the Future*

GOING ELECTRIC

*for your boat,
for a clean ocean,
for a better overall experience*



Why ELECTRINE?	04
e-OUTBOARD	08
e-INBOARD	14
BATTERY Series	16
SPECIFICATIONS	22

Why

ELECTRIC ELECTRINE

for BETTER EFFICIENCY

Electrification makes everything simple no matter where it is applied. An electric propulsion system doesn't require a regular maintenance list, which means you no longer have to get your hands dirty anymore.

"KEEP YOUR HANDS AND OUTFIT CLEAN"



for BETTER PERFORMANCE

Understanding an electric motor, it has more power and torque at lower speeds, which means that an electric motor consumes less energy to make more power. You can feel more power at lower speeds with ELECTRINE propulsion systems with less operating noise and vibration.

"MORE POWER WITH LESS ENERGY CONSUMPTION"



for BETTER EXPERIENCE

ELECTRINE propulsion systems make you experience something you have never experienced compared to gas powered engines. No more feeling guilty from poisoning the maritime environment while you are enjoying your smooth and quiet boat ride with ELECTRINE.

"A MUCH BETTER FEELING"



for BETTER TOMORROW

Your concern for our environment is important to us as well. However, we do not want you to compromise your fun with concerns of the environment. Leave those worries to us. Please feel free to express your love and enjoyment of your boating experience. We make sure we do our job so the environment is better for now and the future.

"YOUR RIDE FINALLY MEETS THE FUTURE"



From our consistent effort on R&D for numerous years, we have succeeded in manufacturing pure electric outboards and inboard propulsions that are absolutely safe for our precious marine environment and to people as well. You can just enjoy your boat ride while ELECTRINE continues to work for the environment for greater energy conservation, and more importantly for your safety.



ANSAN Inboard 350HP x 2



BARCELONA e-Outboard 115HP



OSAKA e-Outboard 90HP



ROTTERDAM e-Outboard 115HP



CALIFORNIA Inboard 350HP x 2



BUSAN e-Outboard 115HP



A single Z090 was installed on a RIB boat.

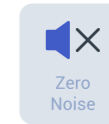


Twin Z0115s were installed on a pontoon boat with stable integration and performance.



A single Z090 was installed on a fishery boat.

Pure Electric **OUTBOARD**



"BETTER PERFORMANCE WITH BETTER CHOICES"

ELECTRINE e-OUTBOARD series guarantee full satisfaction without any compromise on your choices.

No Compromise

There is nothing to compromise on your passion for the ocean. All fun factors are still with ELECTRINE e-OUTBOARD series.

You keep enjoying the ride. We keep working hard to make a perfect pure electric propulsion system that best suits your needs.



The range of your fun is

UP to 180HP



Various lineups are available for your needs.

* All figures are subject to change for improvements.



We are Ready to Show You The Next E-boat Technology

Superior performance with reliable stability cannot be achieved by anyone. ELECTRINE started to develop what others never imagined from 2010, and our endless effort has made one of the best electric propulsion systems available in the world.

ELECTRINE continues to develop the next technology that others cannot even dream about. We believe that it is possible because we are already in the future of others.

ZO 115
115 HP
-
33.87 kWh (Battery)



ELECTRINE e-OUTBOARD series is the core product lineup of ELECTRINE with cutting-edge technology.

* All figures are subject to change for improvements.

All Inclusive



Active Display

Propeller



Battery x 4 Modules



Remote Control Box

ELECTRINE
Makes an Efficient System

ELECTRINE designed all core parts from scratch and makes them all in-house. The system includes display, propeller(for outboard only), battery and remote control box

* All figures are subject to change for improvements.

For Your Longer Lasting Enjoyment



ELECTRINE BATTERY PACKS
can be added as many as you need.*

*All the information and conditions of your boat must be provided before the maximum battery pack load can be calculated.



Pure Electric **INBOARD**



“SMOOTH OPERATION WITH POWERFUL PERFORMANCE”

ELECTRINE e-INBOARD series significantly reduces the annoying noise and vibration, while providing amazing power.

ELECTRINE e-INBOARD series will provide unforgettable experiences on the water. All products are suitable for both saltwater and freshwater. You can enjoy maintenance-free and cost-saving pure electric propulsion systems.

The range of your fun is

UP to 350HP

The system includes



Active Display



Remote Control Box



Battery x 4 Modules

ZI 350
350 HP
-
100.7 kWh
(Battery)



Various lineups are available for your needs.



Powering the Future

ELECTRINE e-INBOARD Series provide stunning performance from 40HP to 350 HP with smooth delivery. Your ride finally meets the future.

ELECTRINE e-INBOARD Series are designed to perform the same or better than its gas engine counterparts while producing less noise and vibration.

* All figures are subject to change for improvements.

Battery Series

ELECTRINE BATTERY series have been designed for all different circumstances and conditions each boat and operation faces. ELECTRINE BATTERY series can be applied and installed onto any types of boats with various conditions.



Modular



Rapid Charging



BR 654



BF 345



BF 86

BR654 100kWh (1 Module : 6.7kWh)
BF345 33.87kWh (1 Module : 8.5kWh)
BF86 14.52kWh (1 Module : 3.6kWh)

Safe Power

ELECTRINE seriously considers safety as a top priority. That is why we put our best effort on the safe design of battery modules and packs. All battery modules and packs meet the global safety standards. The battery packs are installed after all safety check-ups as well as performance tests.

Your safety and satisfaction matter to us.

* All figures are subject to change for improvements.

As everyone's dreams are different from one another, every customer has different needs. That is why we designed and developed ELECTRINE's battery module and packs from scratch since we understand how important it is.

All ELECTRINE battery products meet the upmost safety regulations and requirements to guarantee your safety and maximize the performance to satisfy your needs at the same time. Your safety and satisfaction are important to us.

Versatile



Super Safe Battery Powerpack Technology

• Battery Heat Control System

Applied the CNT (Carbon Nano Tube) heat exchange technology / Maximizing battery efficiency even in low temperatures

Battery Control

- Efficient control and management of Li-ion battery

Optimized Battery Case for Water Resistance

- IP67-level waterproof (Protected from immersion up to 1m in depth)

Easy Battery Replacement

- One-touch battery swapping system

• Battery Temperature Control System

Maintaining the optimal temperature to let the battery system operate at its best condition

External Material

- P.P is applied to absorb shock, high elasticity, acid resistance, lightweight and scratch resistant
- The influence of external temperature and maintains internal temperature consistently with its heat fiber and cooling pipe

Cooling System

- Maintains internal temperature and heat conduction by applying the copper pipe
- Overheating prevention system by applying refrigerants

BATTERY	BP 36 (Portable)	BF 86 (Fixed)	BF 345 (Fixed)	BR 654 (Rack)
Nominal Voltage (Vdc)	36	86.4 (43.2 x 2ea)	345.6 (86.4 x 4ea)	654 (43.6 x 15ea)
Nominal Capacity (Ah)	28	168 (84 x 2ea)	98	154
Energy (kWh)	1.008	14.52	33.87	100.7 (6.7 x 15ea)
Operating Voltage (Vdc)	28.0 ~ 41.0	67.2 ~ 98.4	288 ~ 384	654.3 V
Charging Current	Standard 14A (0.5 C-rate)	Standard 84A (0.5 C-rate)	Standard 30A (0.3 C-rate)	70.2A (0.5 C-RATE)
Discharging Current	Max 80A(2.85 C-rate)	Max 240A(1.43 C-rate)	Max 280A(2.85 C-rate)	MAX. 154 (1 C-RATE)
Communication	CAN 2.0b	CAN 2.0b	CAN 2.0b	CAN 2.0
Operation Temperature (Ambient)	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C	-20 °C ~ 60 °C
Configuration	-	4 Module	4 Module	15 Module
Dimension (mm)	141 x 141 x 260	485 x 842 x 341	992 x 831 x 316	1899 x 890 x 615
Weight (kg)	6.2	80 (Module : 20 x 4)	188 (Module : 47 x 4)	720 (Module : 45 x 15)



You Keep Enjoying the Ride We Will Take Care of the Rest

Your concerns on our environment are precious.
However, we do not want you to compromise your fun on
these considerations.

Please leave those considerations to us.
Please feel free to express your love for the boat ride.
We do our job to make 100% environmentally friendly electric
propulsions for a better overall experience.

Going **ELECTRINE**



Specifications

* In Development

e-OUTBOARD	ZO 40	ZO 60	ZO 90	ZO 115	ZO 150	ZO 180	e-SAILDRIVE	ZS 8	ZS 16
Max / Continuous Power (kW)	43 / 23	60 / 40	110 / 65	120 / 84	140 / 120	250 / 140	Max / Continuous Power (kW)	8 / 6	16 / 11
Max / Continuous Torque (N.m)	72 / 31	220 / 80	255 / 105	251 / 142	350 / 200	950 / 480	Reduction Ratio	1.93 : 1	1.93 : 1
Operational Speed (rpm)	0-8,000	0-9,000	0-8,500	0-6,000	0 - 13,000	0 - 8,600	Operational Speed (rpm)	0 ~ 3,100	0 ~ 3,100
Operating Battery Voltage (Vdc)	72~96	288~384	288~384	288~384	288~384	320~450	Rated Battery Voltage (Vdc)	48	48
Communication	CAN 2.0b	CAN 2.0b	CAN 2.0b / RS232	CAN 2.0b / RS232	CAN 2.0b	CAN 2.0b	Communication	CAN 2.0b	CAN 2.0b
Dimension (mm)	700 x 410 x 1,620	700 x 410 x 1,620	820 x 520 x 1,740	820 x 520 x 1,740	874 x 574 x 1,888	874 x 574 x 1,888	Dimension (mm)	649 x 400 x 1,028	649 x 400 x 1,028
Weight (Kg)	120	135	150	150	155	155	Weight (kg)	40.5	46.5

Battery Capacity Standard (kWh)	14.52	33.87	33.87	33.87	33.87	100	Battery Capacity (kWh)	1.008 (Standard)	1.008 (Standard)
Battery Capacity long (kWh)	29.04	67.74	67.74	67.74	67.74	200	IPDU / Junction Unit	●	●
IPDU / Junction Unit	●	●	●	●	●	●	BCU	●	●
BCU	N/A	●	●	●	●	●	Onboard Charger	●	●
Onboard Charger	●	●	●	●	●	●	Cluster(Display)	●	●
Cluster(Display)	●	●	●	●	●	●	Remote Control Box	●	●
Remote Control Box	●	●	●	●	●	●	Switch Panel	●	●
Switch Panel	●	●	●	●	●	●	Trim & Tilt	N/A	N/A
Trim & Tilt	●	●	●	●	●	●	Steering Wheel	N/A	N/A
Steering Wheel	○	○	○	○	○	○	Tiller	N/A	N/A
Tiller	○	○	○	○	N/A	N/A			
Electric Steering	○	○	○	○	○	○			

e-INBOARD	ZI 40	ZI 60	ZI 90	ZI 115	ZI 150	ZI 180	ZI 250	ZI 300	ZI 350	ZI 550
Max / Continuous Power (kW)	43 / 23	60 / 40	110 / 65	120 / 84	140 / 120	250 / 140	255 / 190	250 / 210	372 / 260	540 / 430
Max / Continuous Torque (N.m)	72 / 31	220 / 80	255 / 105	251 / 142	350 / 200	950 / 480	2,355 / 900	4,000 / 2,090	3,445 / 1,970	2,500 / 2,050
Operational Speed (rpm)	0-8,000	0-9,000	0-8,500	0-6,000	0 - 13,000	0 - 8,600	0-3,700	0-2,450	0-3,400	0-4,000
Operating Battery Voltage (Vdc)	72~96	288~384	288~384	288~384	288~384	320~450	500~750	500~750	600~750	TBD
Communication	CAN 2.0b	CAN 2.0b	CAN 2.0b	CAN 2.0b / RS232	CAN 2.0b	CAN 2.0b	CAN 2.0b	CAN 2.0b	CAN 2.0b	CAN 2.0b
Dimension (mm)	390 x 359 x 322	390 x 359 x 322	664 x 468 x 475	664 x 468 x 475	797 x 1,029 x 627	797 x 1,029 x 627	863 x 1,076 x 618	902 x 1,200 x 733	902 x 1,200 x 733	TBD
Weight (Kg)	65	80	95	95	98.5	98.5	385	495	495	TBD

Battery Capacity Standard (kWh)	14.52	33.87	33.87	33.87	33.87	67.74	135.48	up to 2M	up to 2M	up to 2M
Battery Capacity long (kWh)	29.04	67.74	67.74	67.74	67.74	135.48	up to 2M	-	-	-
IPDU / Junction Unit	●	●	●	●	●	●	●	●	●	●
BCU	N/A	●	●	●	●	●	●	●	●	●
Onboard Charger	●	●	●	●	●	●	●	●	●	●
Cluster(Display)	●	●	●	●	●	●	●	●	●	●
Remote Control Box	●	●	●	●	●	●	●	●	●	●
Switch Panel	●	●	●	●	●	●	●	●	●	●
Steering Wheel	○	○	○	○	○	○	○	○	○	○
Waterjet	○	○	○	○	○	○	○	○	○	○
Sterndrive	○	○	○	○	○	○	○	○	○	○

○ : Option * All figures are subject to change for improvements.



Headquarters

228-50, Saneop-ro 155beon-gil, Gwonseon-gu, Suwon-si, Gyeonggi-do, S. Korea

Seoul Office

322 Teheran-ro, E710, Gangnam-gu, Seoul, S. Korea

T. +82 31 292 6649 F. +82 31 278 1957

E. contact@electrine.co.kr www.electrine.co.kr

VIDEO



CATALOG

