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FUTURE OF ENERGY

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 OREX

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Iron

12V/24V Lithium Iron Phosphate
Battery Solutions



Reliable



Communicable



Realtime Monitoring



Longer Lifespan



Portable

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Why Iron?

Cost Effectiveness

LiFePO4 battery stores much more energy over its life time with less replacement needed compared with lead-acid batteries. This makes LiFePO4 battery the cheapest maintenance-free battery.

Longer Service Life

LiFePO4 batteries have the longest service life among all battery products. This new technology will provide you with 3,000 complete charge and discharge cycles at 80% DOD; whereas, normal lead-acid batteries only provide 350 cycles. LiFePO4 battery's floating service life can reach to 15 years. The longer service life reduces battery replacement frequency and therefore lowers the Total Cost of Ownership (TCO).

Guaranteed Safety

LiFePO4 batteries guarantee the highest safety and eliminate the risk of fire and explosion. The built-in BMS prevents over charge, deep discharge, and over-heating. This protection lets the battery take care of itself, making it safe and robust. State of charge (SOC) and state of health (SOH) can also be obtained to help manage the batteries throughout the entire lifecycle.

Drop-in Replacement

Orex's LiFePO4 battery comes in industry-standard sizes, and they are designed to replace lead-acid batteries in any deep cycle application. They can replace lead-acid batteries directly, and you don't need to replace the original lead-acid battery charging systems, or change the charging settings.

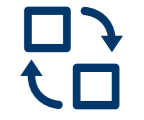
Fast Charge

LiFePO4 batteries can charge and discharge at a high rate providing maximum versatility for all types of applications. Fast charging minimizes downtime, while full charging is possible within one hour.

Smart Management

With the integration of Bluetooth, you can obtain readings of voltage, current, temperature, and the state of charge directly from your smart phone.

≥ 3000 cycles



Lithium Iron Phosphate Battery Solutions

Features:

- The Iron series is Orex Group's latest LiFePO4 battery line. It can be widely applied to any applications that need lead-acid batteries.
- Orex Group independently and successfully developed the high-rate LFP cells and built-in BMS system. The Iron-V series is equipped with a remote management system and allows perfect control and supervision.

Advantages:

- The Iron series has the highest level of safety standards.
- Smart management accurately monitors the operating status of each component. This better control and supervision, enhances overall performance and battery life



Applications

The Iron LiFePO4 batteries can replace lead-acid batteries in any applicable scenarios and applications. In the following applications, LiFePO4 batteries are far more advantageous than lead-acid batteries due to increased cycle life, high cost-effectiveness, and longer service life:



Wind Power System



Solar Power System

Renewable Energy Storage Systems

High-end SLI Applications



RV



Yacht



PHEV



Balance Wheel



AGV



Stacker

Motive Power Applications



Sweeper



Golf Cart



Wheelchair

Technical Specifications / Characteristic Curves

	12V Products												
	LFP12-5EV	LFP12-10EV	LFP12-15EV	LFP12-20EV	LFP12-30EV	LFP12-40EV	LFP12-50EV	LFP12-60EV	LFP12-80EV	LFP12-100SEV	LFP12-100EV	LFP12-200EV	LFP12-300EV
Battery voltage (V)	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Capacity @ 0.5C /25°C (Ah)	5	10	14.5	20	30	40	50	60	80	100	100	200	300
Energy (Wh)	64	128	185.6	256	384	512	640	768	1024	1280	1280	2560	3840
Weight (kg)	0.82	1.5	1.91	3.3	4.7	6	8	9.3	9.8	10.3	13.4	24.5	34
Dimensions (mm)	90*70*107	151*65*100	151*98*101	181*77*167	166*175*125	195*130*168	229*138*213	229*138*213	258*166*215	306*169*215	330*172*220	527*222*249	527*283*249
BCI.Group No.	/	/	/	/	/	U1	22	22	24	27	31	4D	8D
Terminals	F2	F2	F2	M5	M5	M6	M6	M6	M8	M8	M8	M8	M8
Max. continuous discharge current	10	20	20	30	30	40	50	60	80	100	100	200	300
Max. charge current	5	10	15	20	30	40	50	60	80	100	100	200	300
Container material	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS

	24V Products					
	LFP24-30EV	LFP24-40EV	LFP24-50SEV	LFP24-50EV	LFP24-60EV	LFP24-100EV
Battery voltage(V)	25.6	25.6	25.6	25.6	25.6	25.6
Capacity @ 0.5C/25°C (Ah)	30	40	50	50	60	100
Energy (Wh)	768	1024	1280	1280	1536	2560
Weight (kg)	9.4	12.2	13	13.4	17.5	24
Dimensions (mm)	239*132*210	258*166*215	306*169*215	330*172*220	436*108*317	527*222*249
BCI.Group No.	22	24	27	31	/	4D
Terminals	M6	M8	M8	M8	M8	M8
Max. continuous discharge current	30	40	50	50	60	100
Max. charge current	30	40	50	50	60	100
Container material	ABS	ABS	ABS	ABS	ABS	ABS

	Starter Battery Products			
	LFP12-50SS	LFP12-75SS	LFP12-90SS	LFP12-100SS
Battery voltage(V)	12.8	12.8	12.8	12.8
Capacity @ 0.5C/25°C (Ah)	50	75	100	100
Energy (Wh)	640	960	1280	1280
Weight (kg)	8.3	10.5	10	13.4
Dimensions (mm)	258*166*215	258*166*215	306*169*215	330*172*220
BCI.Group No.	24	24	27	31
Terminals	M8	M8	M8	M8
Max. continuous discharge current	50	75	100	100
Max. charge current	50	75	100	100
Container material	ABS	ABS	ABS	ABS

