

"WE STORE THE FUTURE"

PRODUCT CATALOG



ABOUT US

BATARYASAN Enerji San. Tic. A.Ş., which offers innovative solutions for electrochemical energy conversion systems, was founded with the support of TÜBİTAK 1512 Individual Young Entrepreneur (BİGG) Program.It carries out design, R&D, engineering simulations, unique material characterizations, and product development activities for all components required by energy conversion and storage systems.

BATARYASAN Enerji provides services in the design, production, and consultancy of battery technologies, fuel cells, electrolyzers, hydrogen production systems, and their consumables, as well as specialized equipment, test cells, and experimental systems for mobile and stationary applications.

It offers project-based solutions in design, numerical modeling, testing and prototype development, mobile and stationary charging solutions, thermal management, charge management, as well as mechanical, electromechanical, and electronic design for various energy storage and conversion needs in industries such as energy, automotive, defense, aerospace, and biomedical.

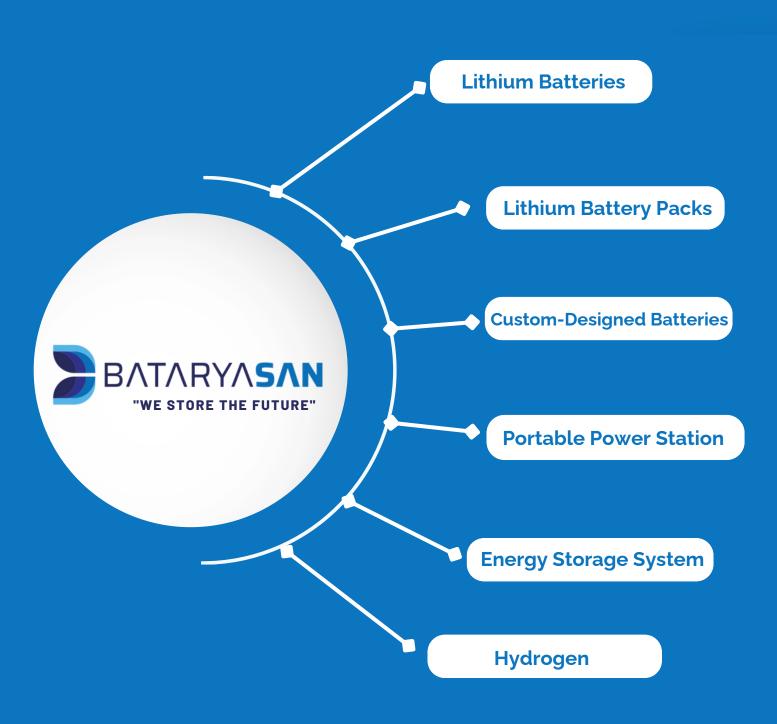
BATARYASAN Enerji adopts a working principle based on team spirit and harmony with all its stakeholders by maintaining customer, supplier, and employee satisfaction at the highest level in accordance with total quality management principles.

Our Vision

To become one of the world's leading companies capable of offering innovative products in the field of energy storage and conversion systems, such as batteries, fuel cells, and electrolyzers.

Our Mission

To provide unique and professional solutions for energy storage and conversion systems needed in various fields at both national and international levels.











What is a Lithium Battery?

Lithium batteries, one of today's most advanced energy storage solutions, are lighter, more efficient, and more durable thanks to their high energy density and long cycle life. They provide consistently high performance without memory effect and are protected against issues such as overcharging and over-discharging by a Battery Management System (BMS).

Lithium batteries can store energy with high efficiency in a short time thanks to their fast-charging capability. This feature provides a significant advantage for systems that require uninterrupted power.

What Are the Applications of Lithium Batteries?

Lithium batteries have a wide range of applications, from renewable energy systems to electric vehicles. They provide a reliable solution for storing energy generated from renewable sources such as solar and wind power, while also serving as a powerful and long-lasting energy source for vehicles like electric cars, motorcycles, and forklifts. Additionally, lithium batteries play a vital role in the telecommunications sector, powering base stations and backup power systems. They are also essential in uninterruptible power supplies (UPS) for data centers and critical infrastructures. In the marine and caravan industries, their lightweight and compact design makes them ideal for boats, yachts, and camper vehicles. Furthermore, they provide a reliable energy source for portable medical and industrial devices, including hospital equipment and robotic applications.







PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	F250
Nominal Voltage	12.8V
Nominal Capacity	12Ah
Capacity	153.6Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	151x65x94
Weight (kg)	1.5
Warranty	2 years
Rated Charge Current	6A
Maximum Charge Current	6A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	12A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs



12V 18Ah Lithium Battery

PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	М6
Nominal Voltage	12.8V
Nominal Capacity	18Ah
Capacity	230.4Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	181x77x172
Weight (kg)	2.3
Warranty	2 years
Rated Charge Current	9A
Maximum Charge Current	9A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	18A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs







PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	М6
Nominal Voltage	12.8V
Nominal Capacity	24Ah
Capacity	307.2Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	181x77x172
Weight (kg)	2.8
Warranty	2 years
Rated Charge Current	12A
Maximum Charge Current	12A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	24A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs



12V 50Ah Lithium Battery

PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	М6
Nominal Voltage	12.8V
Nominal Capacity	50Ah
Capacity	640Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	229x138x212
Weight (kg)	6
Warranty	2 years
Rated Charge Current	25A
Maximum Charge Current	25A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	50A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs













PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Prismatic LiFePO4
Terminal Type	M8
Nominal Voltage	12.8V
Nominal Capacity	102Ah
Capacity	1.3KWh
Self Discharge	<=2%/Month
Cells	3.2V- 105Ah
Cycle Life	3000 times(25°C)
Size (mm)	330x175x205
Weight (kg)	10
Warranty	5 years
Rated Charge Current	50A
Maximum Charge Current	50A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>25.5V
Rated Discharge Current	100A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs



12V 150Ah Lithium Battery

PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	М8
Nominal Voltage	12.8V
Nominal Capacity	150Ah
Capacity	1.95KWh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	510x205x205
Weight (kg)	18.0
Warranty	2 years
Rated Charge Current	50A
Maximum Charge Current	100A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	100A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs







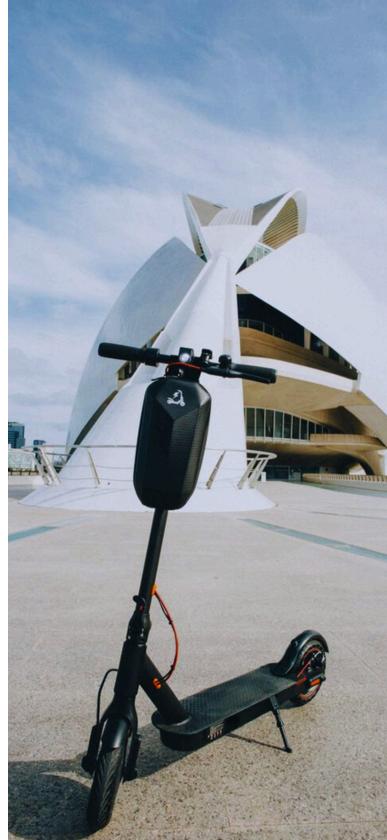
PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Prismatic LiFePO4
Terminal Type	М8
Nominal Voltage	12.8V
Nominal Capacity	210Ah
Capacity	2.6KWh
Self Discharge	<=2%/Month
Cells	3.2V- 105Ah
Cycle Life	3000 times(25°C)
Size (mm)	510x205x205
Weight (kg)	20.0
Warranty	5 years
Rated Charge Current	50A
Maximum Charge Current	100A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	200A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs



24V 100Ah Lithium Battery

PRODUCT FEATURES	
Case Material	ABS
Cell Type-Chemistry	Prismatic LiFePO4
Terminal Type	М8
Nominal Voltage	25.6V
Nominal Capacity	102Ah
Capacity	2.6KWh
Self Discharge	<=2%/Month
Cells	3.2V- 105Ah
Cycle Life	3000 times(25°C)
Size (mm)	510x205x205
Weight (kg)	18.0
Warranty	5 years
Rated Charge Current	50A
Maximum Charge Current	100A
Rated Charge Voltage	27.2~27.6V
Charge Cut-off Voltage	>29.6V
Rated Discharge Current	100A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>20V
Short Circuit Protection	200~600 μs













PRODUCT FEATURES	
Case Material	Shrink Fr4
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	ХТ60
Nominal Voltage	12.8V
Nominal Capacity	12Ah
Capacity	153.6Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	150x80x75
Weight (kg)	1.5
Warranty	2 years
Rated Charge Current	6A
Maximum Charge Current	6A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	12A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs



12V 18Ah Lithium Battery Pack

PRODUCT FEATURES	
Case Material	Shrink Fr4
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	ХТ60
Nominal Voltage	12.8V
Nominal Capacity	18Ah
Capacity	230.4Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	150x110x75
Weight (kg)	2.3
Warranty	2 years
Rated Charge Current	9A
Maximum Charge Current	9A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	18A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs







PRODUCT FEATURES	
Case Material	Shrink Fr4
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	ХТ60
Nominal Voltage	12.8V
Nominal Capacity	24Ah
Capacity	307.2Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	150x150x75
Weight (kg)	2.3
Warranty	2 years
Rated Charge Current	12A
Maximum Charge Current	12A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	24A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs



12V 50Ah Lithium Battery Pack

PRODUCT FEATURE	
Case Material	Shrink Fr4
Cell Type-Chemistry	Cylindrical LiFePO4
Terminal Type	ХТ60
Nominal Voltage	12.8V
Nominal Capacity	50Ah
Capacity	640Wh
Self Discharge	<=2%/Month
Cells	3.2V- 6Ah
Cycle Life	3000 times(25°C)
Size (mm)	330x175x205
Weight (kg)	5.6
Warranty	2 years
Rated Charge Current	25A
Maximum Charge Current	25A
Rated Charge Voltage	13.6~13. 8V
Charge Cut-off Voltage	>14.8V
Rated Discharge Current	50A
Rated Discharge Cut-off Voltage	10.8V
Minimum Discharge Cut-off Voltage	>10V
Short Circuit Protection	200~600 μs





CUSTOM-DESIGNED LITHIUM-ION BATTERY

Every industry and application has unique energy requirements. When standard solutions are insufficient, we develop and manufacture custom-designed lithium-ion batteries tailored to specific project needs. We determine all technical details—such as voltage, capacity, cell type, form factor, and connection configuration—according to your application requirements, providing the most suitable energy storage solutions for your needs. Additionally, with our advanced communication protocols and intelligent terminal management systems, we enable remote monitoring, data analysis, and integrated control, maximizing reliability and efficiency.

Custom-designed batteries, used across a wide range of applications—from defense industry to automotive, renewable energy systems to medical devices, telecommunications to portable electronics—stand out with their high energy density, long cycle life, and advanced safety features. Systems equipped with a Battery Management System (BMS) provide maximum protection with critical safety measures such as overcharging, overdischarging, short circuit prevention, and temperature control.

Custom-designed batteries seamlessly integrate into space-constrained projects thanks to their compact and lightweight design, while their modular structure enables scalable solutions. Charging and discharging rates, operating temperature ranges, and mechanical durability are optimized according to the specific requirements of your application.









CUSTOM-DESIGNED LIFEPO4 BATTERY

Custom-designed LiFePO₄ (Lithium Iron Phosphate) batteries, used in defense industry, renewable energy systems, electric vehicles, telecommunications infrastructure, and industrial applications, stand out with their high energy efficiency, thermal stability, and enhanced safety features. Systems equipped with a Battery Management System (BMS) ensure maximum safety by providing protection against overcharging, over-discharging, short circuits, and temperature fluctuations.

Energy requirements vary significantly depending on the application and usage area. Custom-designed prismatic LiFePO₄ batteries are specifically engineered and manufactured to meet unique needs, delivering high performance, safety, and long lifespan where standard solutions fall short. All technical details, including voltage, capacity, connection type, form factor, and management system, are customized to best suit your application. Additionally, with advanced communication protocols and intelligent terminal management systems, it enables remote monitoring, data analysis, and integrated control.

Thanks to their modular and lightweight design, custom-designed prismatic batteries can be easily integrated into compact spaces, offering scalable energy solutions. Fast charging and discharging support, wide operating temperature range, and long cycle life are optimized according to the specific requirements of your application.





CUSTOM-DESIGNED SOLID-STATE BATTERY

Reliability, longevity, and efficiency are among the most critical factors in energy storage systems. Custom-designed solid-state batteries offer a stable, powerful, and efficient energy solution thanks to their advanced structure. Its optimized performance, superior safety features, and durable structure ensure perfect compatibility with modern energy needs, making it suitable for reliable use across various industries..

In addition, customizable solid-state batteries offer high energy density, superior safety, and long lifespan advantages, providing the energy solutions of the future today. High temperature resistance and low self-discharge rate enable the batteries to deliver maximum performance and reliability in critical applications. These batteries, which can be custom-designed for each project, provide flexible, safe, and efficient solutions for your energy storage needs

Solid-state batteries, which prioritize energy efficiency, offer high energy capacity and provide a long-lasting and sustainable power source. Minimal energy loss and optimized power usage reduce environmental impact, providing a more efficient energy management solution.







Custom-Designed Batteries



Custom-Designed Batteries







24V 200Ah Lithium Battery

PRODUCT FEATURES		
Case Material	Metal	
Cell Type-Chemistry	Prismatic LiFePO4	
Terminal Type	SB50/Terminal/Cable	
Nominal Voltage	25.6V	
Nominal Capacity	210Ah	
Capacity	307.2Wh	
Self Discharge	<=2%/Month	
Cells	3.2V- 210Ah	
Cycle Life	3000 times(25°C)	
Size (mm)	450x410x200	
Weight (kg)	37.0	
Warranty	5 years	
Rated Charge Current	50A	
Maximum Charge Current	100A	
Rated Charge Voltage	27.2~27.4V	
Charge Cut-off Voltage	>29.6V	
Rated Discharge Current	100A	
Rated Discharge Cut-off Voltage	21.6V	
Minimum Discharge Cut-off Voltage	>21V	
Short Circuit Protection	200~600 μs	

48V 100Ah Lithium Battery

PRODUCT FEATURES	
Case Material	Metal
Cell Type-Chemistry	Prismatic LiFePO4
Terminal Type	Terminal
Nominal Voltage	48V
Nominal Capacity	105Ah
Capacity	5 kWh
Self Discharge	<=2%/Month
Cells	3.2V- 210Ah
Cycle Life	3000 times(25°C)
Size (mm)	450x405x210
Weight (kg)	37.0
Warranty	5 years
Rated Charge Current	50A
Maximum Charge Current	100A
Rated Charge Voltage	51~51,4V
Charge Cut-off Voltage	>55,5V
Rated Discharge Current	100A
Rated Discharge Cut-off Voltage	40.5V
Minimum Discharge Cut-off Voltage	>39.4
Short Circuit Protection	200~600 μs



Custom-Designed Batteries



51.2V 100Ah Lithium Battery

PRODUCT FEATURES		
Case Material	Metal	
Cell Type-Chemistry	Prismatic LiFePO4	
Terminal Type	M8	
Nominal Voltage	12.8V	
Nominal Capacity	12Ah	
Capacity	153.6Wh	
Self Discharge	<=2%/Month	
Cells	3.2V- 6Ah	
Cycle Life	3000 times(25°C)	
Size (mm)	150x80x75	
Weight (kg)	1.5	
Warranty	5 Years	
Rated Charge Voltage	6A	
Maximum Charge Current	6A	
Rated Charge Voltage	13.6~13. 8V	
Charge Cut-off Voltage	>14.8V	
Rated Discharge Current	12A	
Rated Discharge Cut-off Voltage	10.8V	
Minimum Discharge Cut-off Voltage	>10V	
Short Circuit Protection	200~600 μs	















PRODUCT FEATURES	
Power (W)	300
Battery (Wh)	307
Capacity (Ah)	24
Size (mm)	140x360x185
Type-C PD Output	5V-20V
USB-A Output	5V , 2.5/4.6A
DC Output	12V
AC Output	220V , 50Hz
Life Cycle	>3000
Full Charge Time	About 3.5 hours
Weight (kg)	~5.3
Certifications	CE, RoHS, UL, MSDS
Warranty	2 years



BT-600W Portable Power Station

PRODUCT FEATURES	
Power (W)	600
Battery (Wh)	614
Capacity (Ah)	48
Size (mm)	175x400x200
Type-C PD Output	5V-20V
USB-A Output	5V , 2.5/4.6A
DC Output	12V
AC Output	220V , 50Hz
Life Cycle	>3000
Full Charge Time:	About 6 hours
Weight (kg)	~8.0
Certifications	CE, RoHS, UL, MSDS
Warranty	2 years





8000mAh Tablet







10W Light

67 times

1250mAh Camera 60W Car Refrigerator





























PRODUCT FEATURES	
Power (W)	1000
Battery (Wh)	1075
Capacity (Ah)	84
Size (mm)	210x360x260
Type-C PD Output	5V-2.1A
USB-A Output	5V~20V
DC Output	12V
AC Output	220V , 50Hz
Life Cycle	>3000
Full Charge Time	About 3.5 hours
Weight (kg)	~14
Certifications	CE, RoHS, UL, MSDS
Warranty	2 years



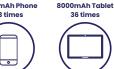
BT-1500W Portable Power Station

PRODUCT FEATURES	
Power (W)	1500
Battery (Wh)	1344
Capacity (Ah)	105
Size (mm)	220x500x220
Type-C PD Output	5V-20V
USB-A Output	5V , 2.5/4.6A
DC Output	12V
AC Output	220V , 50Hz
Life Cycle	>3000
Full Charge Time	About 6 hours
Weight (kg)	~15.5
Certifications	CE, RoHS, UL, MSDS
Warranty	2 years















10W Light 108 hours



1250mAh Camera 60W Car Refrigerator 234 times 18 hours









8000mAh Tablet









1250mAh Camera 292 times



60W Car Refrigerator 22 hours







BT-1500W Portable Power Station

PRODUCT FEATURES	
Power (W)	1500
Battery (Wh)	1344
Capacity (Ah)	105
Size (mm)	490x415x320
Type-C PD Output	5V-20V
USB-A Output	5V , 2.5/4.6A
DC Output	12V
AC Output	220V , 50Hz
Life Cycle	>3000
Full Charge Time	About 6 hours
Weight (kg)	~15.5
Certifications	CE, RoHS, UL, MSDS
Warranty	2 years





Energy Storage System





Energy Storage System

Today's rapidly evolving energy demands require more reliable, efficient, and sustainable solutions. Energy Storage Systems (ESS) play a vital role in optimizing renewable energy sources, stabilizing electrical grids, and enhancing energy supply security.

Energy storage systems store electricity generated from solar, wind, and other renewable energy sources, allowing the energy to be used when needed. In this way, off-grid energy usage becomes possible, and system stability is maintained against consumption fluctuations.

Thanks to advanced energy management technologies, energy can be stored efficiently and used with maximum effectiveness. Smart control systems optimize energy management, prevent unnecessary losses, and ensure long-lasting performance.

Energy storage systems work in integration with renewable sources such as solar and wind energy, creating a sustainable energy infrastructure. The stored energy can be used during nighttime or periods of low production, ensuring uninterrupted power supply and helping to reduce the carbon footprint.



Energy Storage System





Energy Storage Systems have a wide range of applications, from industrial facilities to residential buildings, and from commercial enterprises to electric vehicle charging stations. They also serve as an ideal solution for applications such as uninterruptible power supplies (UPS), microgrids, and grid support systems.

Energy storage systems can be customized according to the application area and energy requirements. Thanks to their modular structure, they are scalable, can integrate with various energy infrastructures, and adapt to changing needs.

Energy storage systems not only provide uninterrupted and efficient energy, but also play a crucial role in environmental sustainability. By reducing dependence on fossil fuels, they help lower carbon emissions and enable the more effective use of renewable energy sources. By balancing fluctuations in energy production, energy storage systems ensure more efficient use of natural resources and help reduce pressure on the ecosystem. As the foundation of future energy infrastructure, these systems play a critical role in enabling a cleaner environment, lower energy costs, and a more sustainable way of life.



Hydrogen BATARYASAN



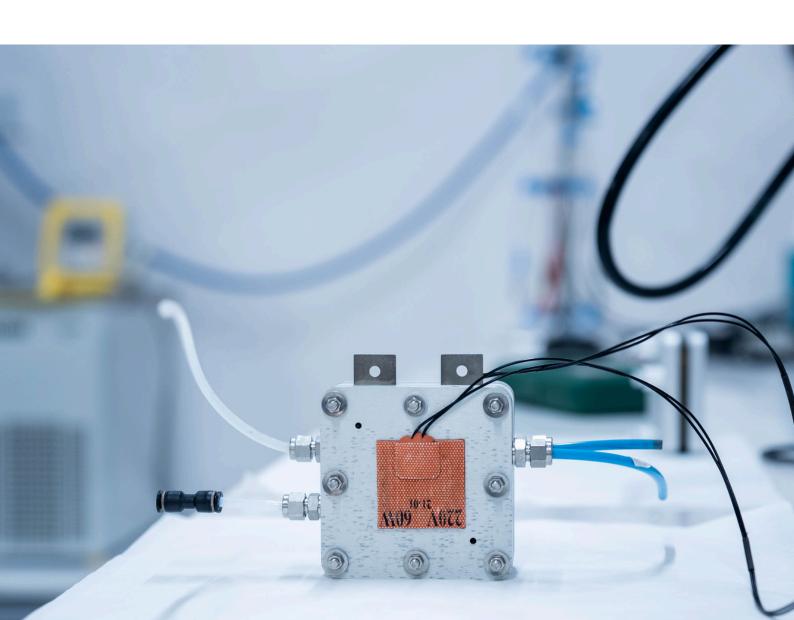




At BATARYASAN ENERJİ, we have transitioned into industrial applications with over 12 years of academic experience in hydrogen energy and fuel cells. As the most important energy carrier among renewable energy sources, hydrogen is at the core of our work, and we provide our customers with innovative solutions regarding its production methods and utilization.

For the use of hydrogen energy as a fuel, hydrogen production systems capable of providing high-purity production (such as electrolyzers, borohydride-based systems, etc.) are being developed. In addition, the subcomponents, single cells, and stack assemblies of fuel cells, which enable electrochemical energy conversion by using hydrogen as a fuel, can be produced.

Synthesis and characterization studies of catalysts, which are critical components of electrochemical systems capable of energy conversion such as electrolyzers, fuel cells, and capacitors, are being carried out. With suitable catalysts, MEA (Membrane Electrode Assembly) production can be performed in desired sizes, and electrochemical measurements can be conducted. Services are provided for the 3D modeling, two-phase flow analysis, optimization, and production of bipolar plates and gas diffusion electrodes. In addition, cell testing for all these systems can be carried out under various environmental conditions and operating parameters, tailored to specific needs.



Hydrogen



In line with sustainability goals in the energy sector, carbon-neutral solutions are becoming increasingly important. In this context, hydrogen stands out as a clean energy carrier and plays a key role in energy transition by minimizing environmental impact when produced from renewable sources.

When hydrogen is converted into electricity using fuel cells, it emits only water vapor, causing no harm to the environment. These zero-emission systems have a wide range of applications, from industrial facilities to the transportation sector. When produced from renewable energy sources, hydrogen creates a fully sustainable cycle and contributes significantly to the global energy transition.

Thanks to its high energy density, hydrogen offers the possibility of long-term storage. When produced from renewable energy sources such as solar and wind, it ensures an uninterrupted supply of energy. Hydrogen can be used as a reliable and efficient energy source in critical areas such as electricity generation, industry, transportation, and heating systems.

In line with global goals to reduce carbon emissions, hydrogen energy is seen as the key to clean energy transition. Green hydrogen technologies are revolutionizing the energy sector by replacing fossil fuels and offering an environmentally friendly alternative in high-energy-consuming areas such as industry and transportation.





"WE STORE THE FUTURE"

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