



# Powering the Grid of Tomorrow

Pomega Energy Storage Technologies





# Kontrolmatik Technologies

Pomega is one of Kontrolmatik's subsidiaries



Established as an  
automation company in



**2008**

In 4 continents  
worldwide control



**9 offices**

Technology provider  
for a sustainable  
future



**5 factories  
2 R&D Centers**

One of the largest  
system integrator in  
the World



**22<sup>nd</sup>**

As an EPC Company,  
providing turnkey projects  
and completed over



**350 projects**

As a leading global  
company has a  
footprint in



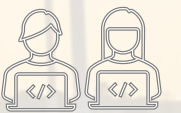
**+40 countries**

A big family with a  
multinational staff



**+1.400 people**

Design and  
engineering for future



**+65%**

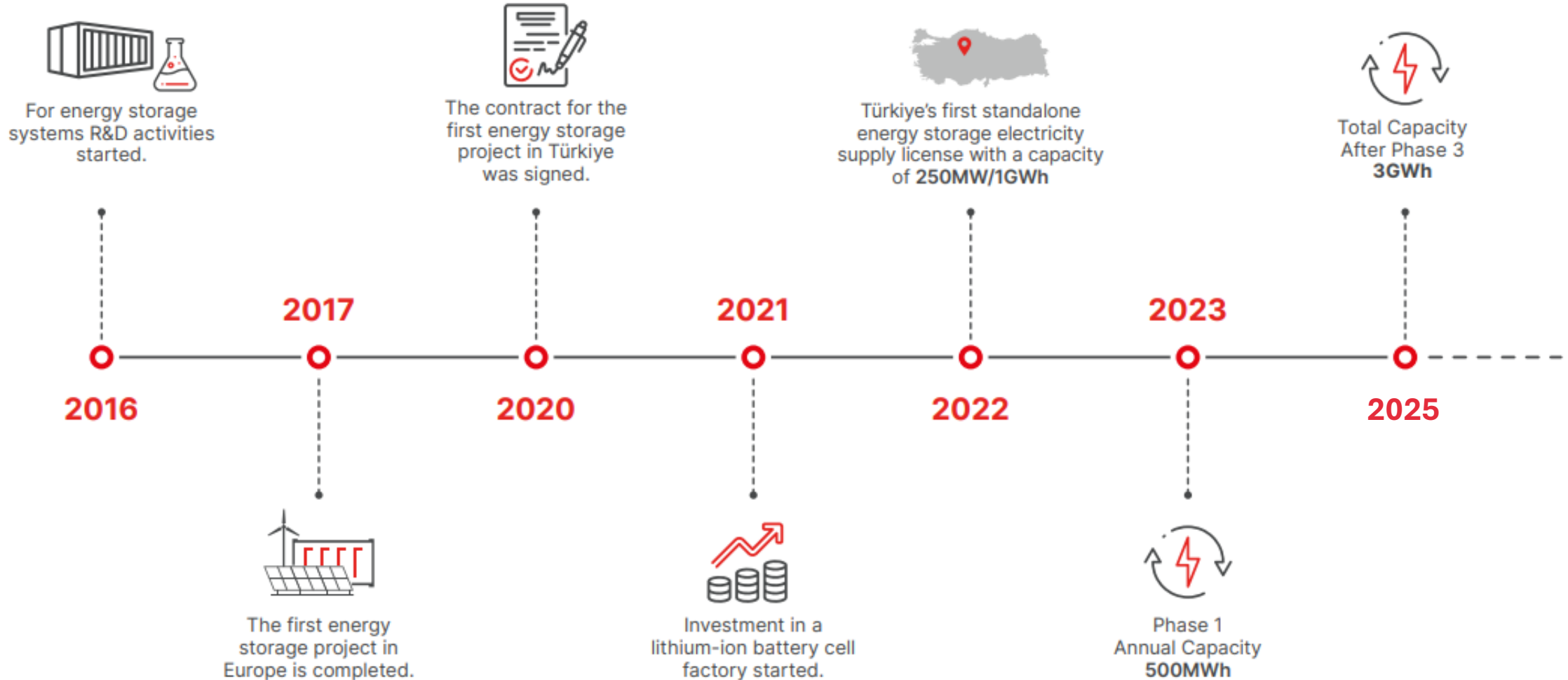
Pomega's shareholding structure comprises 88% ownership by Kontrolmatik, 10% by İş Portföy, and 2% by Rubellius.



# Our Journey

over 9 years of strong experience in the battery sector

Pomega





# European Independent **Battery Giga Factory**

Pomega is the first and only LFP battery cell and BESS manufacturer in the region

**Pomega**



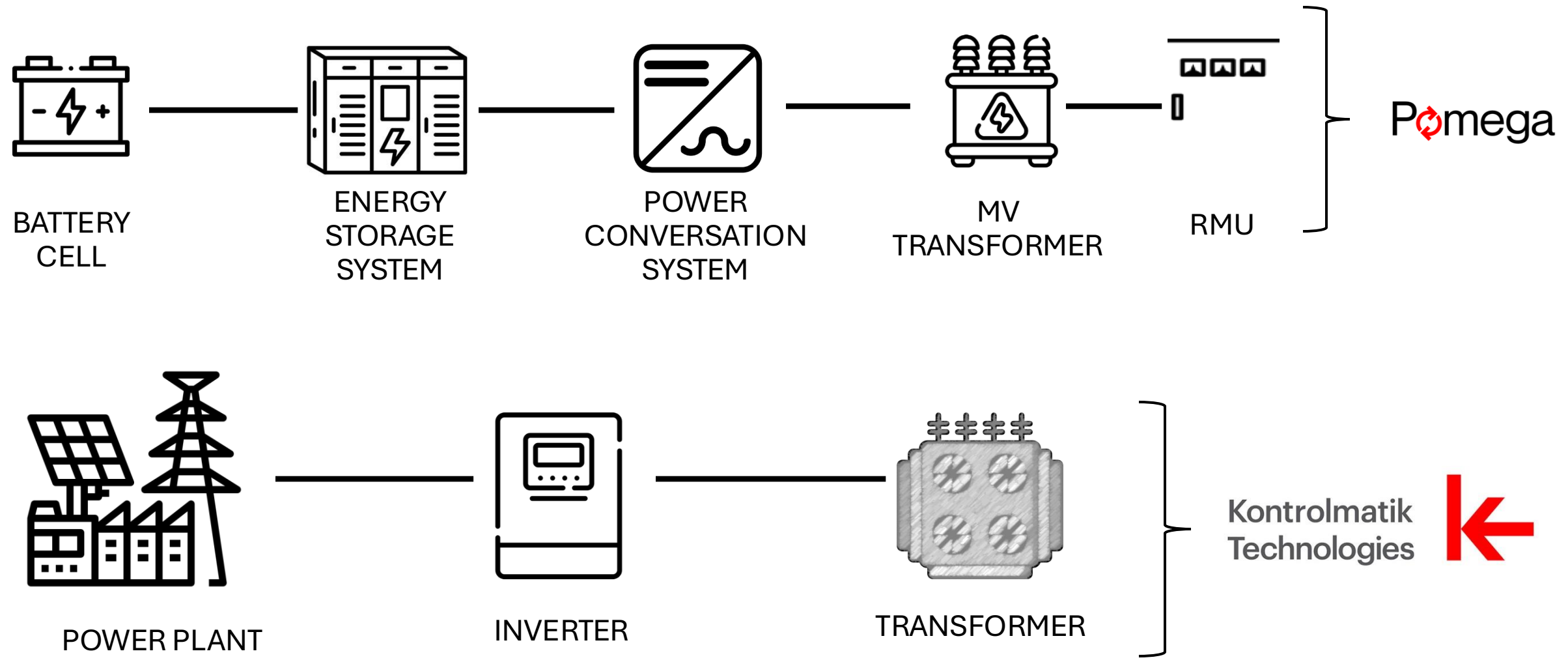
- + The region's **very first and only** Prismatic-Lithium-Ion (LiFePO<sub>4</sub>) Battery Cell was **opened in August '23**,
- + From **battery cell** to the **end-products**
- + **500 MWh/year** inaugural capacity,
- + Will be increased to **3 GWh/year** by Q4/2025,
- + Low-Emission **gigafactory** with **zero waste** and carbon-neutral production,
- + **LEED Certification**, Roof-top SPP, waste heat recovery, rainwater harvesting and more.



# Creating All Battery Ecosystem

unique position in the market against far-east manufacturers

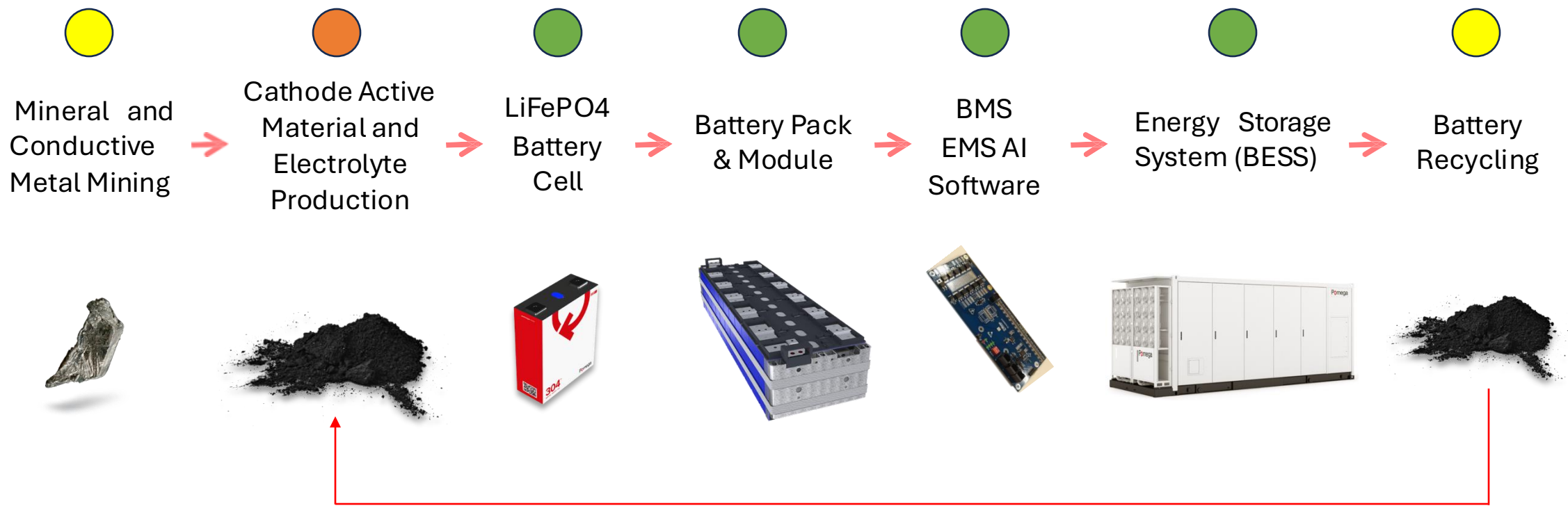
Pomega








# Creating All Battery Ecosystem

unique position in the market against far-east manufacturers



 Online     Under Investment     Planning





# Advanced Manufacturing

from raw material to the battery energy storage system

Pomega



1. Mixing
2. Coating
3. Calendering
4. Slitting
5. Cell assembly
6. Drying
7. Electrolyte filling
8. Formation and aging
9. Testing and grading



# Pomega plays a pivotal role in the energy transition

offering end-to-end battery and energy storage products



## Main Sectors



## Certifications



ISO Standards



UL Certification – NAR, SAR & World Wide



IEC Certificates / World Wide



Certificate of Confirmation for ISO, IEC & EN



Certificate of Confirmation for IEC





# From Türkiye to The World

Pomega



LFP Battery Cells



LFP Storage Cluster



Residential Energy Storage Products



Utility Scale Energy Storage System



LFP Battery Packs



# Products

## LFP Battery Cell

Pomega



### LONG-LAST USE

Lithium-Iron Phosphate Battery Cells enable a high number of cycles, ensuring smooth system operation and maximizing overall life cycle.



### SMOOTH OPERATION

Work smoothly under every circumstances



### EFFECTIVE AND PROFITABLE

Provide high stability solutions to their users for multiple purposes.



### FLEXIBLE AND CONVENIENT

Easy to install and maintain with modular design.



Mall



Hospital



Public Building



Residence



Factory



Solar Power  
Plant



Wind Power  
Plant



Thermal Power  
Plant



National Grid  
Connection





# Products

## 314 Ah LFP Battery Cell



(\* )Test Conditions: 25°C, at 80% DOD, 80%SOC  
(\*\* )Test Conditions: 25°C, at 70% DOD, 70%SOC  
(\*\*\*) Performance may vary in different conditions

Basic Properties	PLFP-314
Cell Type	LiFePO4 - Prismatic
Nominal Capacity	314 Ah
Nominal Voltage	3.2V
Charge Cut-off Voltage	3.65V
Discharge Cut-off Voltage (> 0°C)	2.50V
Charge Cut-off Current	0.05C
Discharge Temperature (***)	-30~60°C
Charge Temperature	0~55°C
Storage Temperature	-30~60°C
Standard Charge/Discharge Rate (25°C)	0.5C/0.5C
Max. Continuous Charge/Discharge Rate	1C / 1C
Max. Pulse (30s) Charge/Discharge Rate	2C / 2C
ACR (25°C, 15%SOC,1KHz)	0.10~0.25mΩ
DCR (25°C, 50%SOC,100A/10s)	≤0.4mΩ
Self Discharge	≤3%/month (100%SOC, 25°C ± 2C)
Cycle Life	≥9000(**)
Physical Properties	
Humidity Range	0-85%RH (non-condensing)
Altitude	<3000m
Case	Prismatic - Aluminium
Width	173.82 ± 0.5 mm
Depth	71.72 ± 0.5 mm
Height (No Pole)	204.22 ± 0.5 mm
Height (Including Pole)	207.01 ± 0.5 mm
Weight	5.60 ± 0.84 kg



# Products

## Residential Energy Storage Systems



Using residential energy storage systems combined with solar or wind power plants and connected to the grid enables a home to store excess clean energy either for its own use or for selling back to the grid. The system can then recharge from the grid automatically during off-peak hours, capitalizing on cheaper tariffs. This setup creates a more flexible energy system, increasing the possibilities for renewable energy and helping to decarbonize the grid.

We accord a right to the people for choosing their energy source and believe that everyone has a right to use sustainable energy. POMEGA Residential Energy Storage Systems give you energy independence.

### APPLICATIONS

- + One package with inverter and battery
- + Advanced energy management
- + Off-Grid & On-Grid applications
- + Long lifetime
- + Reliable and safe technology
- + Elegant design
- + Easy installation & operation
- + Expandable capacity



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



Multi Task

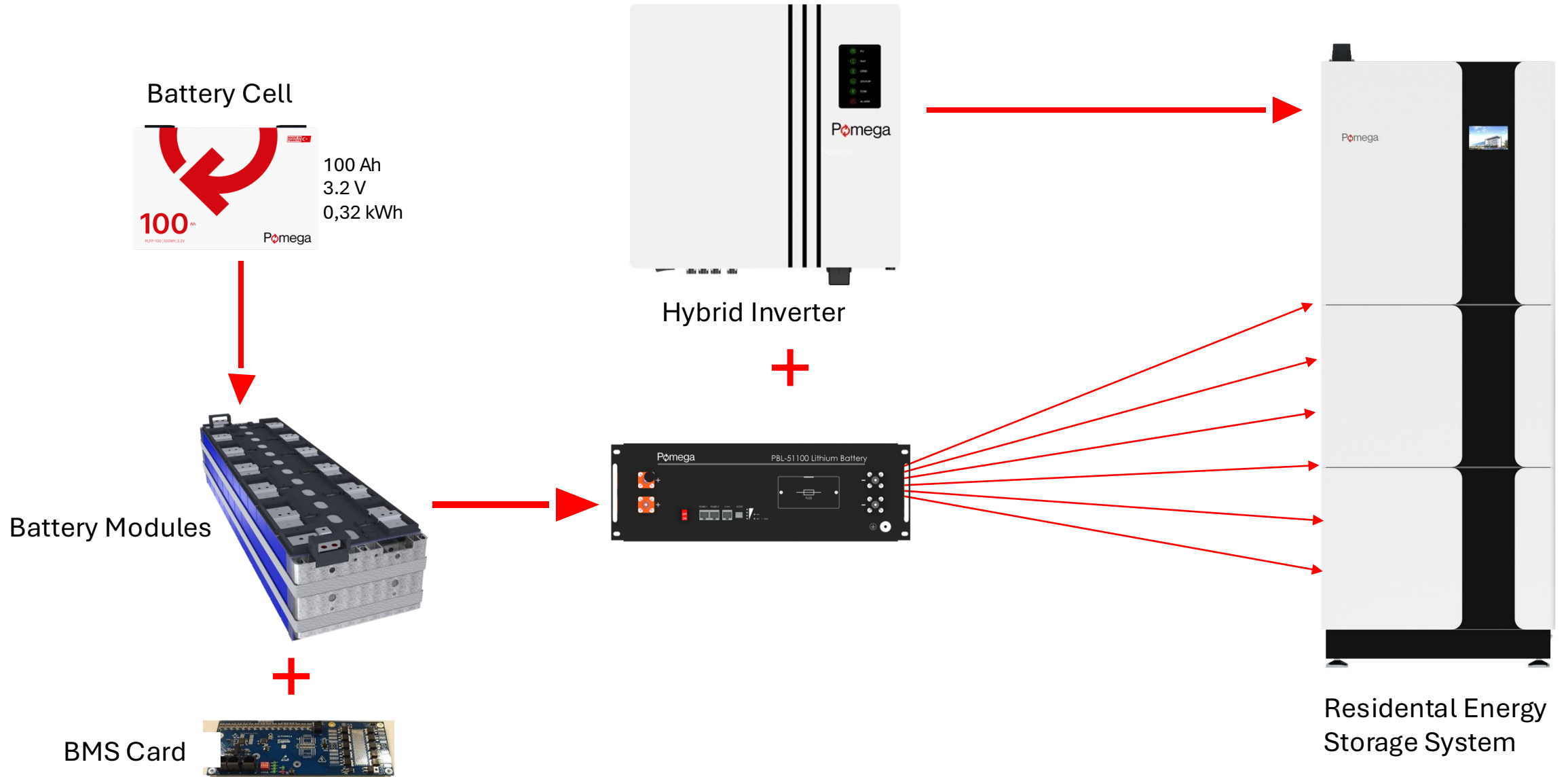




# Products

## Residential Energy Storage Systems

Pomega

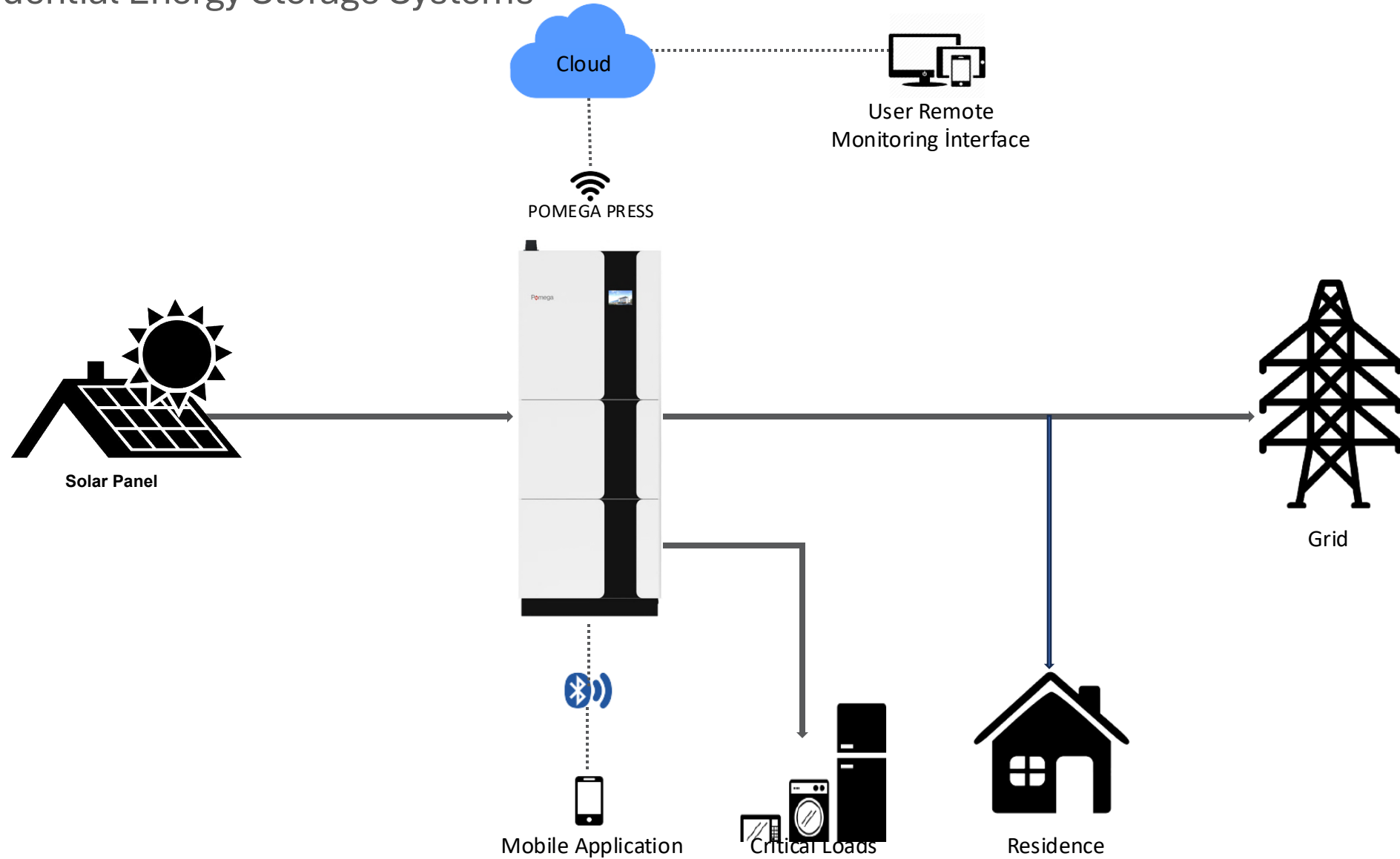




# Products

## Residential Energy Storage Systems

Pomega

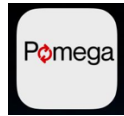






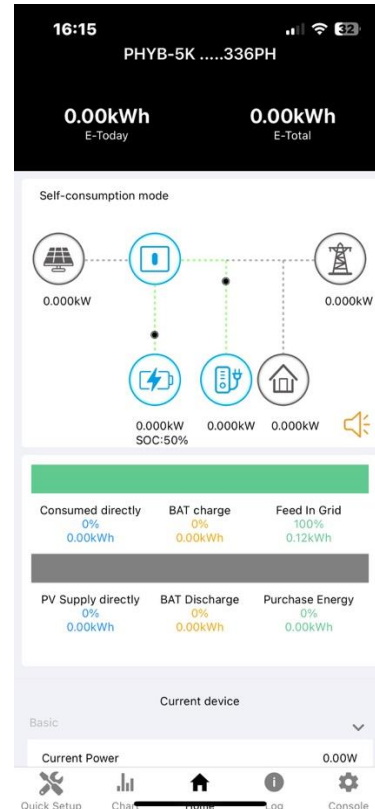
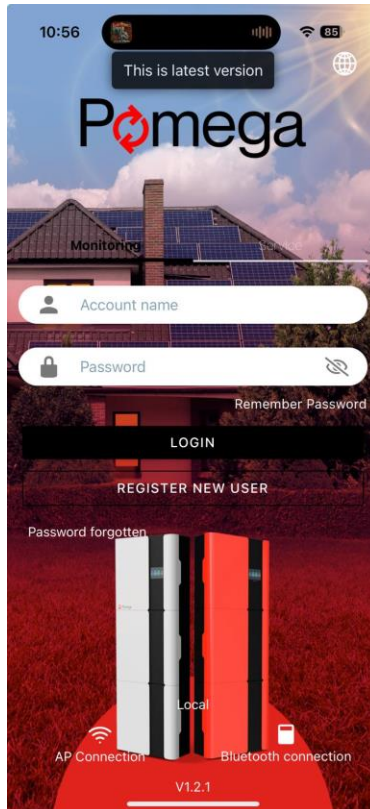
# Products

## PomTouch Application



### PomTouch

Pomomega Energy Storage Technologies



- + Available on Google Play Store App Store
- + Easy-to-navigate
- + User-friendly interface
- + Making it accessible for all users
- + Does not collect any data from the phone



With the introduction of 4G in the telecommunications sector, it became inevitable that energy demand would increase. It will increase even more with the introduction of 5G. In order to close this energy gap, it is inevitable that lead acid batteries will be replaced by Li-Ion.

### APPLICATIONS

- + Load Shifting / Peak Shaving
- + Frequency regulation
- + UPS / bridging power



- 

Easy Integration
- 

Modular & Mobile
- 

Plug & Play
- 

Remote Control
- 

High Efficiency
- 

Multi Task





# Products

## C&I Energy Storage Systems



To avoid the effects of variable energy prices in the industries, Energy Storage Systems give a chance to control energy consumption.

Balancing power grids and saving energy costs, represents a concrete means of improving energy efficiency and integrating more renewable energy sources into electricity systems.

It will also help to enhance and create a well-functioning internal market with lower prices for consumers.

### APPLICATIONS

- + Peak shaving
- + Load shifting
- + UPS / bridging power
- + Maximization of self consumption
- + Backup power
- + Grid flexibility services
- + Black start



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



Multi Task



# Products

## C&I & EV-Charger Station Energy Storage Systems



Energy storage has increasingly been used as a solution for deploying electric vehicle charging in areas where the grid is constrained or where a high number of rapid - 50kW or above - chargers are to be deployed. Installing stationary storage for these stations can reduce the huge power supply investments.

Energy Storage Systems can be installed with Solar Systems in order to have a more reliable and sustainable infrastructure for EV Charging Stations. With this approach, installations of EV Charging stations can be decentral, flexible and independent.

### APPLICATIONS

- + Demand control
- + Peak shaving
- + Load shifting
- + UPS / bridging power
- + Backup power
- + Grid flexibility services



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



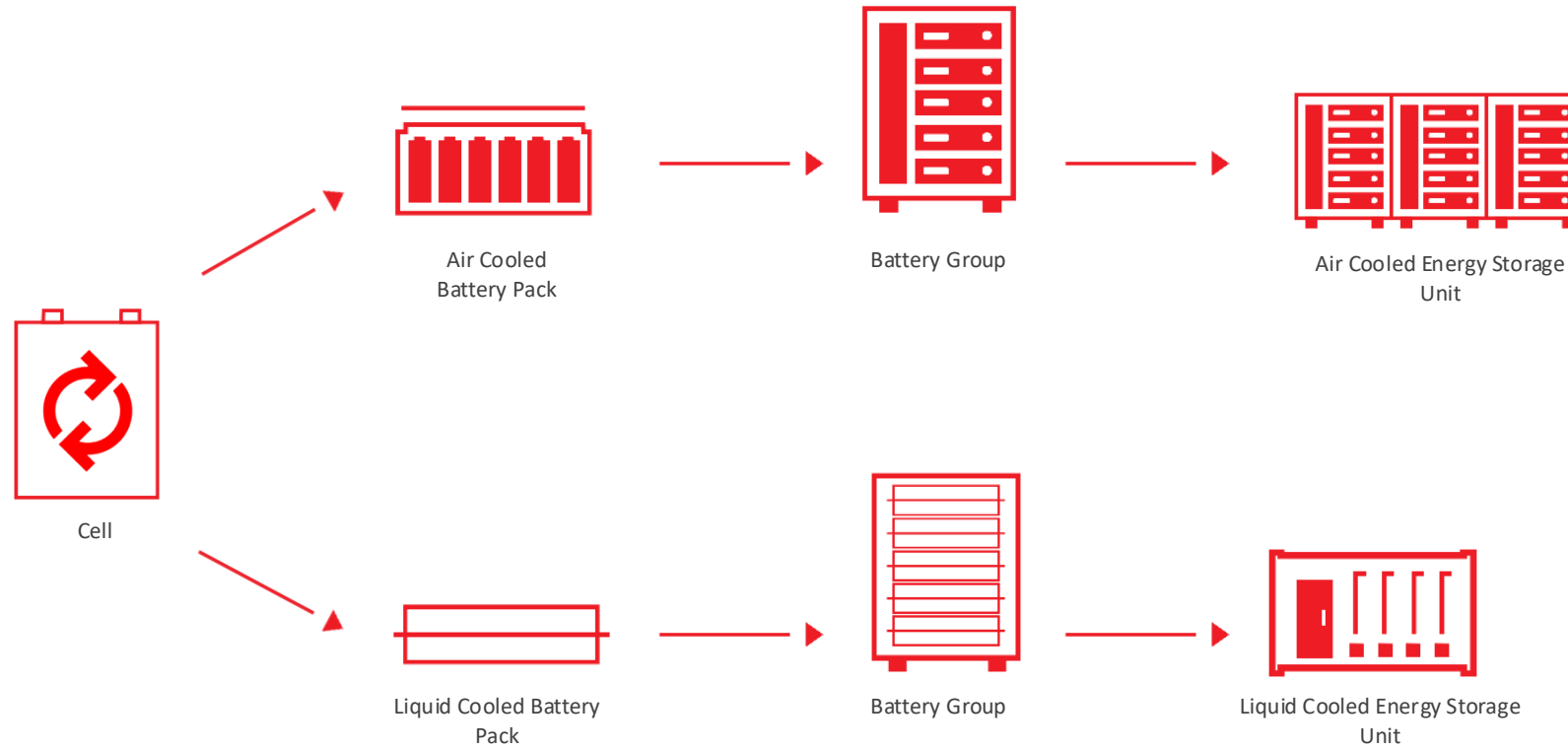
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# Products

## C&I Energy Storage Systems

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Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



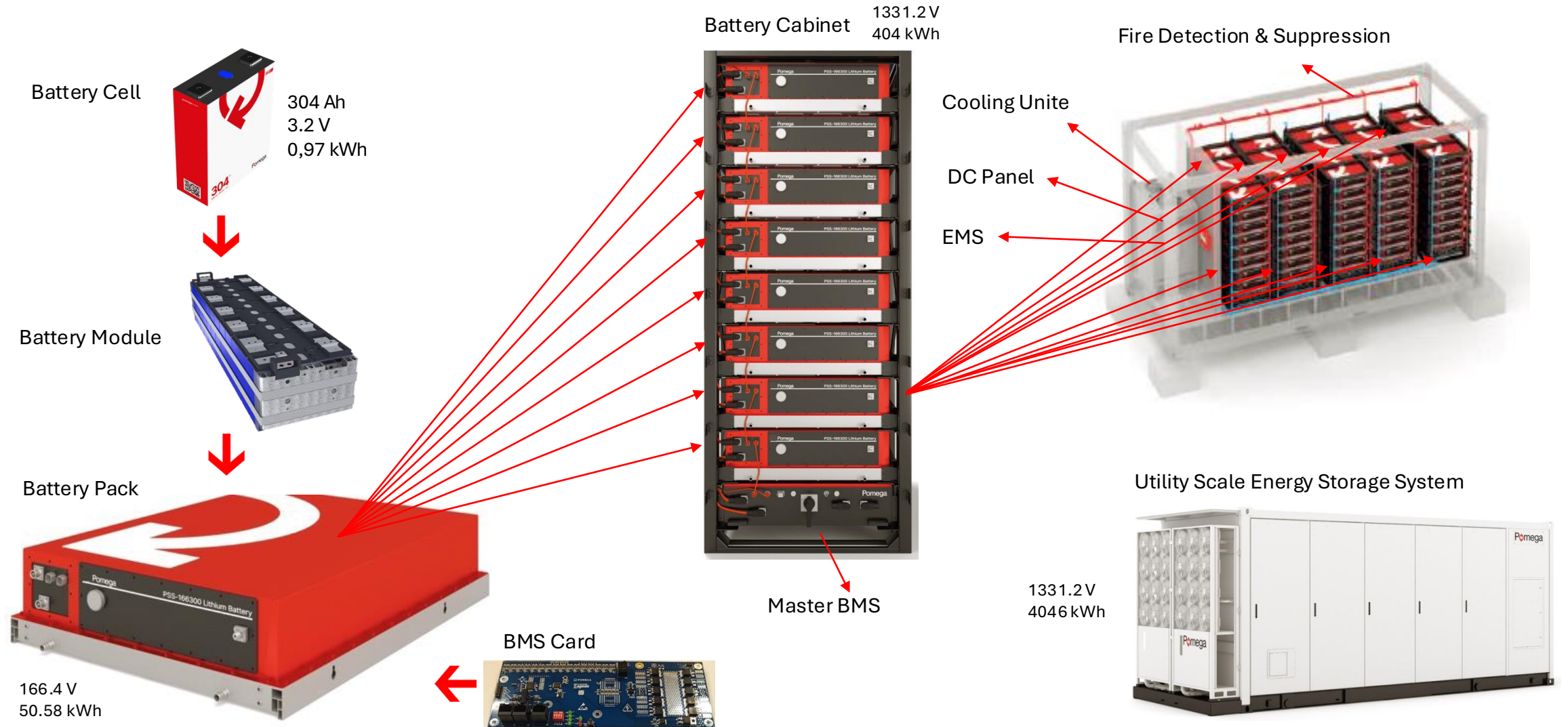
Multi Task





# Products

## Grid-Scale Energy Storage Systems





# Products

## Grid-Scale Energy Storage Systems



Renewable energy power plants, with their fluctuating structures, have variable and sometimes unpredictable production profiles throughout the day.

Energy Storage Systems offers unique opportunities to maintain renewable energy-based generation and to ensure that fewer conventional power generation facilities are needed on the grid. With these systems, excess production can be stored during the day and used when production decreases.

### APPLICATIONS

- + Peak Shaving
- + Load / peak Shifting
- + Spinning reserve displacement
- + Ramp rate control
- + Frequency regulation
- + Energy arbitrage
- + Black-start
- + UPS / bridging power
- + Transitional power
- + Power factor correction



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



Multi Task





# Products

## Standalone Energy Storage Systems



Designed to provide low-cost, high-density grid-scale solutions, Energy Storage Plants are able to be monitored and controlled 24/7 remotely, by providing the solutions needed by the grids with fully integrated battery modules, inverters, battery and energy management systems.

### APPLICATIONS

- + Advanced energy management
- + Off-Grid & On-Grid applications
- + Long lifetime
- + Reliable and safe technology
- + Expandable capacity



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



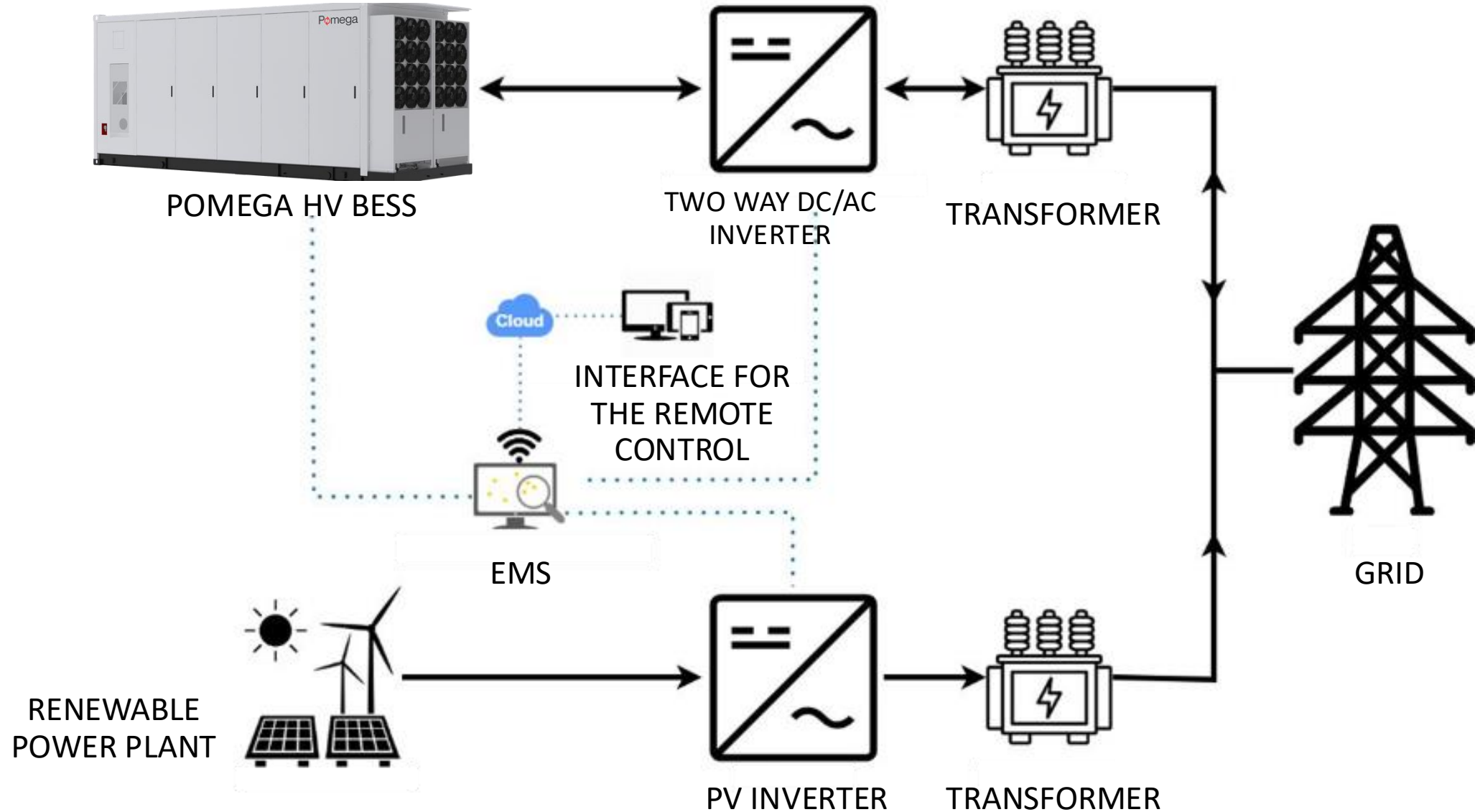
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# Products

## Battery Energy Storage Systems





# Products

## Defence Energy Storage Systems

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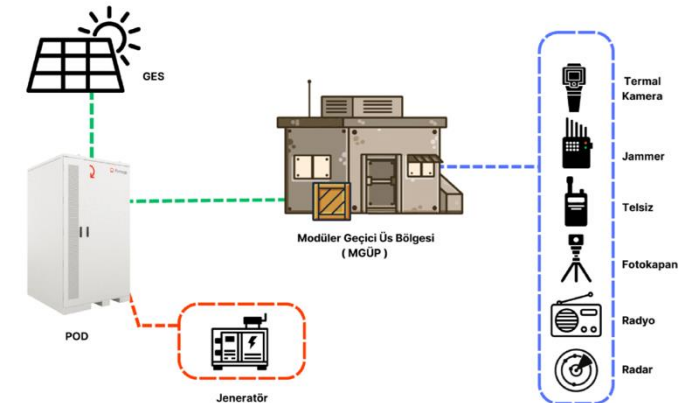


Microgrids offer lower investment costs as they do not require the establishment of a renewable energy facility. They provide additional protection against power outages and main grid failures, enhancing energy security.

When disconnected from the main grid, microgrids can continue operating independently by drawing energy from batteries. Additionally, they facilitate the integration of renewable energy sources such as solar and wind, contributing to the reduction of carbon emissions.

### APPLICATIONS

- + Uninterrupted Power Supply
- + Energy Independence and Security
- + Renewable Energy Integration
- + Cost Efficiency
- + Emergency and Crisis Management
- + Operational Flexibility
- + Mobility
- + Reliable and Continuous
- + Psychological Superiority
- + Term Strategic Planning



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



Multi Task



# Products

## Mobility Energy Storage Systems

Pomega



In this period when electric vehicles are gaining importance, especially electric vehicles on the commercial side must have high cycle levels. For this reason, the conversion of L7 class vehicles to electric, especially large commercial vehicles such as Electric Buses and Trucks, as well as Forklifts, Golfs and small area transportation, is of great importance.

### APPLICATIONS

- + Easy installation and operation
- + Increasable capacity
- + Modular structure
- + 12V, 24V, 48V, 80V and 400V battery designs



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



Multi Task







# Products

## Marine Energy Storage Systems



Powering a New Era of Sustainable Marine Exploration. The vast expanse of the oceans has long beckoned with the promise of adventure and discovery. However, traditional marine battery technology has imposed limitations, tethering vessels to shore power and compromising environmental responsibility. With the advent of LifePO4 batteries, a paradigm shift is underway, empowering a new era of sustainable and independent exploration.

Pomega LifePO4 batteries represent a transformative leap in marine technology, empowering a future of boundless exploration, unwavering performance, and responsible environmental stewardship. Choose the power of innovation and chart a course towards a more sustainable and exhilarating nautical experience.

### APPLICATIONS

- + Peak Shaving
- + Load / peak Shifting
- + Spinning reserve displacement
- + Ramp rate control
- + Frequency regulation
- + Energy arbitrage
- + UPS / bridging power
- + Transitional power



Easy Integration



Modular & Mobile



Plug & Play



Remote Control



High Efficiency



Multi Task

