



# The modular energy storage system

Innovation  
from Central Europe,  
with TIER 1  
certification

[WWW.IKBATTERIES.COM](http://WWW.IKBATTERIES.COM)

# About us

IK BATTERIES proudly presents Central Europe's first modular energy storage system based on lithium iron phosphate (LFP) technology, designed and manufactured with our participation, and certified as TIER 1. Our cabinet-type energy storage solution is optimized for the unique energy, regulatory, and business needs of the Commercial & Industrial (C&I) sector.

**Why IK BATTERIES?** *Regional presence – global quality*





# Key features

## ➔ Modular Design – Scalability

Our systems are built with modular AC and DC sides, allowing for easy customization in terms of performance and capacity — expandable in 100 KW steps up to 500 KW.

## ➔ Flexibility and Local Manufacturing

Critical components are produced in our Chinese TIER 1 partner's factory, while final assembly (confectioning) is carried out at our facility in Slovakia under strict quality control. All products are TIER 1 certified.

## ➔ Integrated Protection and Control

On the DC side, our system includes a Battery Management System (BMS), temperature regulation, and fire suppression system (FSS), ensuring safe and reliable operation.

## ➔ Reliable AC Side

Inverters (PCS) are built from 100 kW modules and can optionally be supplemented with MPPT, STS, and EMS components. All components meet the requirements of regional energy providers and regulatory authorities.

## ➔ Outstanding Energy Density

Thanks to its compact design and optimized internal structure, our systems are easy to transport and quick to install. From our warehouse in Slovakia, we can serve customers in the region's countries within a few days.



# Certifications and compliance

## ➔ DC Side Components

Environmental and Fire Safety Authority approvals

## ➔ AC Side Components

Full compliance with local DSO and ICE standards





# Our services – Beyond hardware



On-site  
servicing and  
local language  
customer  
support

Rapid  
spare parts  
delivery

Software-based  
remote  
management  
and application  
integration

EMS available  
in local  
languages

EPC services  
and project  
financing upon  
request,  
with partner  
involvement

# Application areas

- ➔ Anti-backfeeding protection
- ➔ Off-grid systems
- ➔ Arbitrage and energy market optimization
- ➔ FFR & FCR services
- ➔ Demand control
- ➔ Self-consumption optimization (Load shifting)
- ➔ Scheduling of solar power plant production
- ➔ Support for aggregators and virtual power plants (VPP)





# Our products



| Base models  | Power (KW) | Capacity (KWh) |
|--------------|------------|----------------|
| IKB 100/418  | 100        | 418            |
| IKB 200/836  | 200        | 836            |
| IKB 300/1254 | 300        | 1254           |
| IKB 400/1672 | 400        | 1672           |
| IKB 500/2090 | 500        | 2090           |

Custom configurations (performance/capacity) different from the basic models are available upon request.  
Please contact our staff for a personalized offer!



# Technical data /

## DC side

| Parameters                      | Value                                           |
|---------------------------------|-------------------------------------------------|
| Battery voltage range           | 582.4V~759V DC                                  |
| Nominal capacity                | 418 KWh                                         |
| Nominal power range             | 100 KW ( up to 500KW with multiple DC cabinets) |
| Battery cell                    | LiFePO <sub>4</sub> (LFP)                       |
| Size (W*D*H) mm                 | 1300*1360*2350                                  |
| Weight                          | 3700kg                                          |
| FSS                             | Aerosol                                         |
| Designed life cycle             | 8000                                            |
| Cooling method                  | liquid                                          |
| Max DC RTE BOL                  | 94.10%                                          |
| Relative humidity range         | 0%-95%, RH (No condensation)                    |
| Noise                           | ≤75db                                           |
| Allowable operating temperature | -20 ~ +55℃                                      |

# Technical data /

## AC side

| Parameters          | Value                                            |
|---------------------|--------------------------------------------------|
| Rated power         | 100-500KW                                        |
| Max output power    | 10%                                              |
| Rated AC current    | 160A(*1-5)                                       |
| Rated Voltage AC    | 400V,3W+PE                                       |
| Earthing type       | TN-C / TN-S                                      |
| Rated frequency AC  | 50/60Hz±5Hz                                      |
| Power factor range  | -1 leading to+1 lagging                          |
| Size (W*D*H) mm     | 1350*1360*2350                                   |
| Weight              | 2500kg ( dependent on the ordered configuration) |
| Overload capacity   | 110%, normal operation; 120%, 1 minute           |
| Protective Class    | I                                                |
| Ambient temperature | -25°Cto +60°C (derating above 45°C)              |





# Technical data /

## Inverter

| Parameters                               | Value                                  |
|------------------------------------------|----------------------------------------|
| Rated power                              | 100kW                                  |
| Max. power                               | 110kW                                  |
| DC operating voltage range               | 580~1000V ( 3W+PE)                     |
| DC-side full load voltage                | 625~1000V ( 3W+PE)                     |
| Max. DC                                  | 160A                                   |
| Rated AC voltage                         | 400Vac, 3W+PE                          |
| Rated frequency                          | 50/60Hz ( $\pm 5$ Hz )                 |
| Rated AC current                         | 144A                                   |
| Overload capacity                        | 110%, normal operation; 120%, 1 minute |
| THDi                                     | < 3% (rated power)                     |
| Power factor                             | -1 leading to +1 lagging               |
| Maximum efficiency                       | 98.50%                                 |
| Dimensions (W*D*H)                       | 566 (without ear kits 520)*600*150mm   |
| Weight (approx.)                         | 68kg                                   |
| Isolation mode                           | No isolation                           |
| Anti-corrosion grade                     | C3                                     |
| Application environment protection level | Module built into outdoor cabinet IP55 |
| IP rating                                | IP20                                   |
| Ambient temperature                      | -30°C to +60°C (derating@>45°C)        |
| Relative humidity                        | 0 to 95% (no condensation)             |
| Cooling system                           | Air cooled                             |
| Noise                                    | < 70dB                                 |
| Altitude                                 | 3000m (derating above 3000 meters )    |
| Communication interface                  | RS485 (optional)/CAN                   |

# Certificates

IEC 62109-1  
IEC 62109-2  
EN 50178  
IEC 62619  
IEC 61000-1  
IEC 61000-2  
IEC 61000-3  
IEC 61000-4  
EN 50549-1  
PN50549 PTPIREE

EN 50549-2  
EN 61427  
OVE R25  
IEC62920  
UN38.3  
IEC62920  
EMC 2014/30/EU  
UL9540  
UL9540A  
NFPA 855





# Contact us



[www.ikbatteries.com](http://www.ikbatteries.com)



[hello@ikbatteries.com](mailto:hello@ikbatteries.com)