Intelligent ESS, Zero Carbon Future

Golen Power Technology Co., Ltd.

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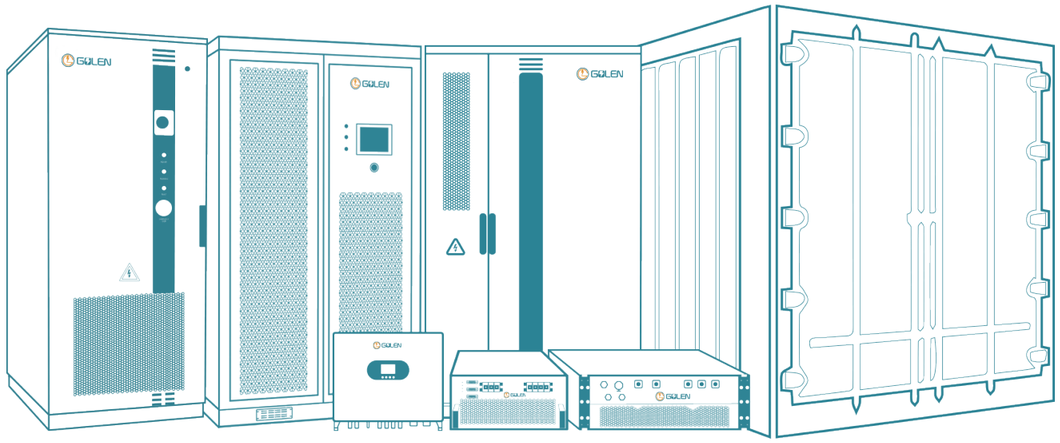
# GOLEN POWER



# INTELLIGENT ENERGY STORAGE SERIES PRODUCTS

2025 V 1.1

GOLEN POWER TECHNOLOGY CO., LTD.

# CATALOGUE

# COMPANY PROFILE

Located in Jiangbei New Area, China (Jiangsu) Pilot Free Trade Zone Nanjing Area. As one of the high-tech enterprises and a specialized and special new enterprise, Golen Power specializes in the R&D, production, and sales of PCS, hybrid inverter, battery pack, BESS, and other products, and investment, development, construction, and service of the photovoltaic power station and energy storage power station. Golen Energy is a sub-company of Golen Power for overseas business.

The products are widely used in residential hybrid inverter, commercial and industrial PCS, flexible transformer area interconnected PCS, PV-Storage-Diesel Generator ESS, industrial and commercial ESS, etc. Some products are applied to key national projects. Golen's products have been exported to Europe, USA, Japan, Mexico, Dubai, Pakistan, Africa, and other countries and regions.

Golen has established university-enterprise strategic cooperation with Nanjing University of Aeronautics and Astronautics、Nanjing Tech University and other universities, set up a doctoral workstation, and jointly built a new energy research results transformation base, talent training base, etc.






**50000+**
m² BUILDING AREA

**2**
PRODUCTION BASE

**2GW+5GWh**
ANNUAL CAPACITY

**100+**
PATENTS

**>6%**
R&D INVESTMENT

# DEVELOPMENT HISTORY

**2017**

Golen Power Technology Co., Ltd. was established and has a production base of 20,000 square meters;

Specializing in the research and development, production and sales of energy storage related products;

The team has nearly 20 years of experience in photovoltaic and energy storage industry.

**2018**

Launched 30~60kW utility frequency hybrid inverter;

Won the "Top Ten Most Popular Energy Storage Inverter Brands" award.

**2019**

Launched 30~50kW high-frequency hybrid inverter;

50~630kW energy storage bidirectional converter;

New R&D base of 8,000 square meters.

**2020**

Launched 5~20kWh household battery packs and energy storage inverters;

Won the "Best PCS Supplier in China" award.

**2021**

Launched 10~20kW household hybrid inverter;

Won the "Best Energy Storage Inverter Supplier" award;

Won the "Best Energy Storage System Solution" project award.

**2022**

Launched high-voltage stacking all-in-one products;

Liquid-cooled container energy storage system ,

And direct-flexible series energy storage hybrid inverter;

Establishing a doctoral workstation ;

Won the "Top Ten PCS Suppliers in China" award.

**2023**

Established the holding subsidiary Golen Energy Technology Co., Ltd.;

Launched grid-forming PCS and outdoor cabinet energy storage systems;

Won the "Best PCS Supplier in China's Energy Storage Industry in 2023" award;

Won the title of "Top Ten Brands and Top Ten PCS Suppliers in China's Energy Storage Industry in 2023".

**2024**

Launched 186kW-255kW high-frequency bidirectional energy storage converter,

Large container energy storage system, 30~135kW high-frequency bidirectional energy storage converter ;

New production base of 6,000 ㎡

Won the "Best PCS Supplier Award for China's Energy Storage Industry in 2024" ;

Won the "2024 China New Energy Storage Industry New Quality Productivity PCS Innovation Award" ;

Won the "2024 Best Energy Storage Small and Medium Power Bidirectional Converter Supplier Award".

# QUALIFICATIONS AND HONORS

- Jiangsu Province High-tech Enterprise
- Nanjing Polytechnic University Doctoral Workstation
- Jiangsu Energy Storage Industry Association
  The first council member units
- Member unit of Jiangsu Energy Industry Association
- Jiangsu Public Relations Association
  Executive Director Unit of the Comprehensive Energy Services Committee
- Executive director unit of Jiangsu Renewable Energy Industry Association
- 2024 Outdoor Cabinet Energy Storage System Technology Innovation Award
- 2024 China Energy Storage Industry Best PCS Supplier Award
- China's New Energy Storage Industry in 2024
  New Quality Productivity PCS Innovation Award
- Best Energy Storage Small and Medium Power in 2024
  Bidirectional Converter Supplier Award
- 2023 China Energy Storage Industry Best PCS Supplier Award
- Top 10 Brands and Top 10 PCS Suppliers in China's Energy Storage Industry in 2023
- Top 10 Brands and Top 10 PCS Suppliers in China's Energy Storage Industry in 2022
- Best Energy Storage Small and Medium Power in 2021
  Bidirectional Converter Supplier Award
- Best of 2021 Solar Storage and Charging Integrated Solution Project Award
- China International Energy Storage Conference
  2019 China Energy Storage Industry Best PCS Supplier Award
- Leading the Top 100 Renewable Energy Pioneers in China in 2018 Single Top Photovoltaic Power Station Investment, EPC Brand Award
- Leading the Top 100 Renewable Energy Pioneers in China in 2018 New Energy Storage Application Brand Award
- 2018 Polaris Cup Top Ten Most Popular Energy Storage Inverter Brand Supplier Award
- 2018 North Star CupTop Ten Most Popular Energy Storage Power Station Brand Supplier Award


# MODULAR PCS

## LEG-100K/125K/135K-TL-P

Advanced three-level topology design Maximum efficiency up to 98.5%

AC/DC dual power supply backup ensures control system power supply

DC Wide Voltage Design

Modular Design Supports Multi-unit Parallel Connection

Microgrid

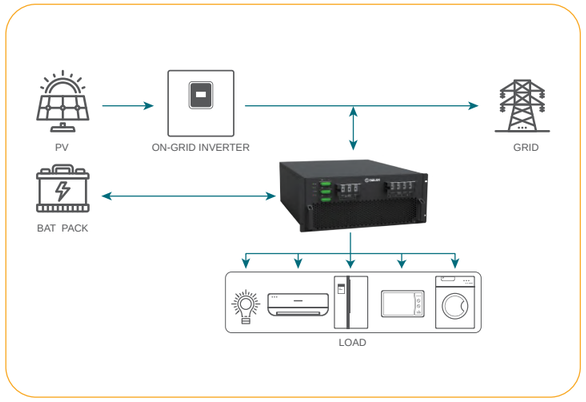
Communication base station

Factory

Farm

Hospital

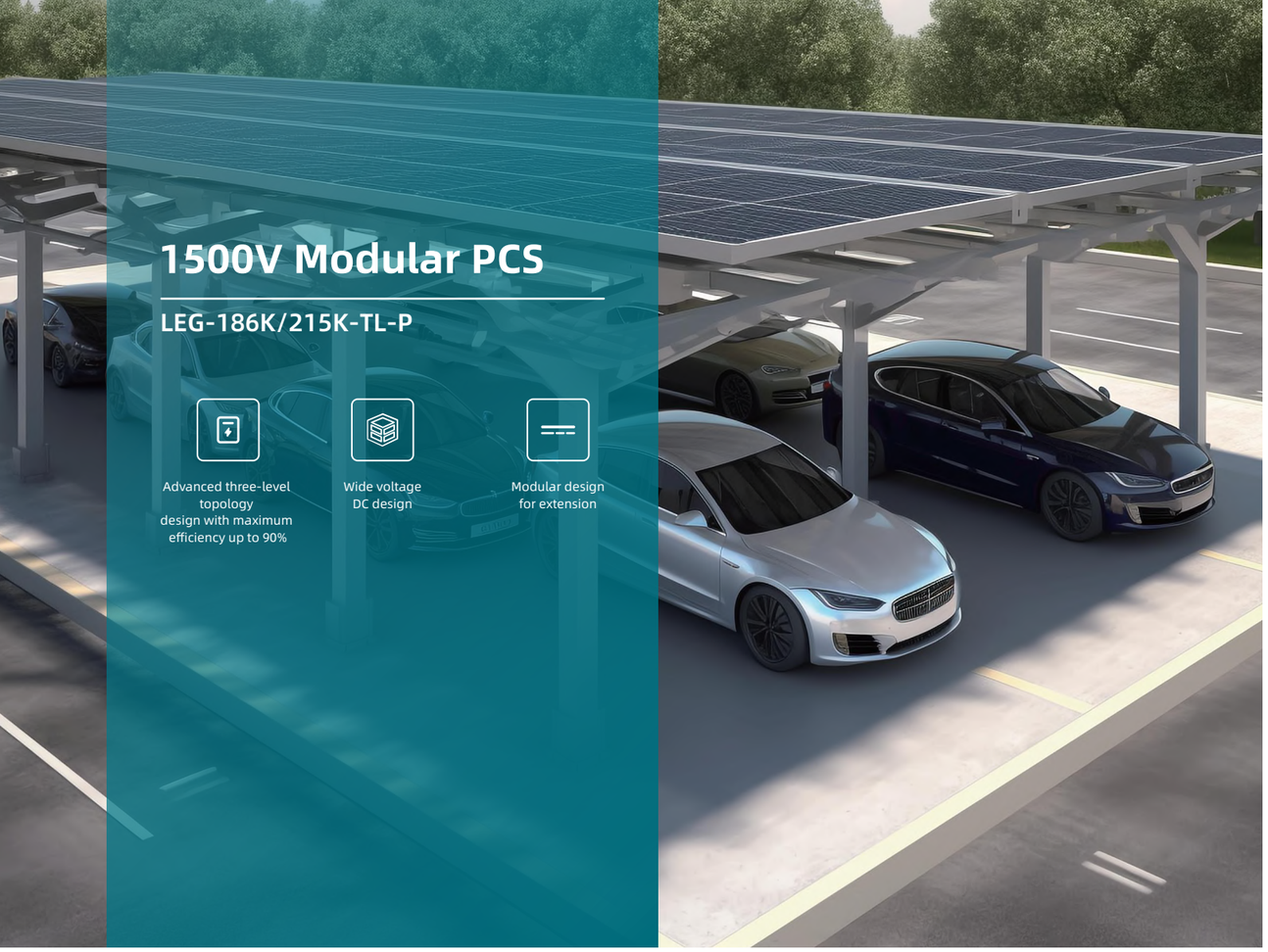
Hotel








| Model | LEG-100K-TL-P | LEG-125K-TL-P | LEG-135K-TL-P |
|---|---|---|---|
| **DC Side** | | | |
| DC Voltage Range [V] | 650~950 | | |
| Number of Input Channels | 1 | | |
| Battery Types | Lithium | | |
| **AC Side (On-Grid)** | | | |
| Rated Power [kW] | 100 | 125 | 135 |
| Max. Power [kVA] | 110 | 138 | 149 |
| Max. Output Current [A] | 159 | 198 | 215 |
| Rated Grid Voltage [V] | 3/N/PE,230/400 | | |
| Rated Grid Voltage [Hz] | 50/60(±5%) | | |
| THDi | <3%(@Rated Power) | | |
| DC Component | <0.5% In | | |
| **AC Side (Off-Grid)** | | | |
| Rated Output Power [kW] | 100 | 125 | 135 |
| Max. Output Power [kVA] | 110 | 138 | 149 |
| Overload Capacity | 110% Long-term operation | | |
| Rated Output Voltage [V] | 400 | | |
| Rated Frequency [Hz] | 50/60 | | |
| THDu | <3%(@Linear Load) | | |
| Unbalanced Load Capacity | 100.0% | | |
| **Efficiency** | | | |
| Max. Efficiency | 98.5% | | |
| **General Parameters** | | | |
| Protection Function | DC reverse connection protection, AC short circuit protection, grid monitoring, island protection, surge protection | | |
| Isolation Transformer | None | | |
| Protection Level | IP20 | | |
| Cooling Method | Intelligent air cooling | | |
| Relative Humidity | ≤95%,Non-condensing | | |
| Operating Temperature [℃] | -30~+55( > 45 Derating ) | | |
| Altitude [m] | 4000( > 2000 Derating ) | | |
| Display Mode | Touch screen/external | | |
| Dispatch Communication Method | Ethernet、RS485 | | |
| BMS Communication Method | RS485、CAN | | |
| Communication Protocol | MODBUS-RTU/TCP | | |
| Weight [kg] | ≈50 | ≈75 | |
| Dimensions (W*D*H) [mm] | 436*650*256 | 520*680*220 | |



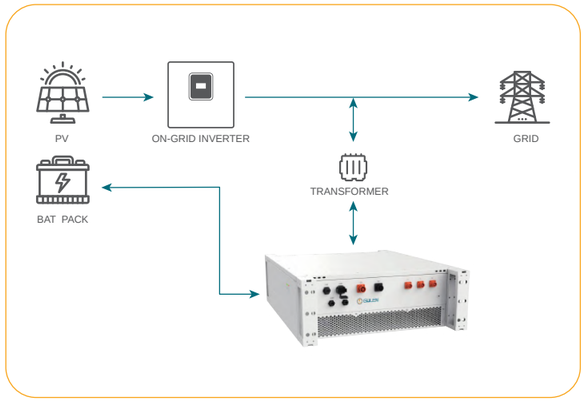
# 1500V Modular PCS

## LEG-186K/215K-TL-P

Advanced three-level topology design with maximum efficiency up to 90%

Wide voltage DC design

Modular design for extension




GOLEN

| Model | LEG-186K-TL-P | LEG-215K-TL-P |
|---|---|---|
| **DC Parameters** | | |
| Max. DC Voltage [V] | 1500 | |
| DC voltage Range [V] | 1070~1500 | |
| **AC Parameters (On-Grid)** | | |
| Rated Output Power [kW] | 186 | 215 |
| Max. Output Power [kVA] | 205 | 237 |
| Max. Output Current [A] | 172 | 198 |
| Rated Grid Voltage | 3W/PE,690Vac | |
| Rated Grid Frequency [Hz] | 50 | |
| Grid Frequency Range [Hz] | 47~53 | |
| Power Factor | 1(0.9 Leading ~ 0.9 Lagging) | |
| THDi | ≤3%(@Rated Power) | |
| **Protection function** | | |
| DC Overvoltage Protection | Yes | |
| DC Short Circuit Protection | Yes | |
| AC Overvoltage Protection | Yes | |
| Reverse Polarity Protection | Yes | |
| Module Temperature Protection | Yes | |
| **Efficiency** | | |
| Max. Conversion Efficiency | 99% | |
| **General Parameters** | | |
| Isolation Transformer | None | |
| Protection Level | IP66 | |
| Operating Temperature [℃] | -25~+60 | |
| Relative Humidity | 0~95%,Non-condensing | |
| Cooling Method | Intelligent air cooling | |
| Max. Altitude [m] | 3000( > 3000 Derating) | |
| Communication Interface | RS485,Ethernet,CAN | |
| Communication Protocol | Modbus RTU | |
| Weight [kg] | ≈100 | |
| Dimensions (W*D*H) [mm] | 750*270*760 | |

# HYBRID INVERTER

## LEI-50K/100K/250K/500K/630K-TT

Utility frequency topology
Strong impact resistance

AC and DC dual power backup ensures power supply to the control system

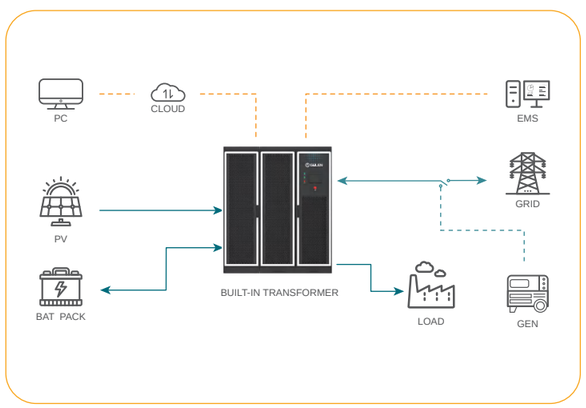
Suitable for normal use in high altitude and cold areas

Support seamless switching between on-grid and off-grid

Integrated design, Internally integrated interfaces of photovoltaic, battery, grid, and load

DC coupled design
High system efficiency

Microgrid PV power station Factory Farm Mine Hospital




【Power Frequency】
【Three-phase Four-wire】





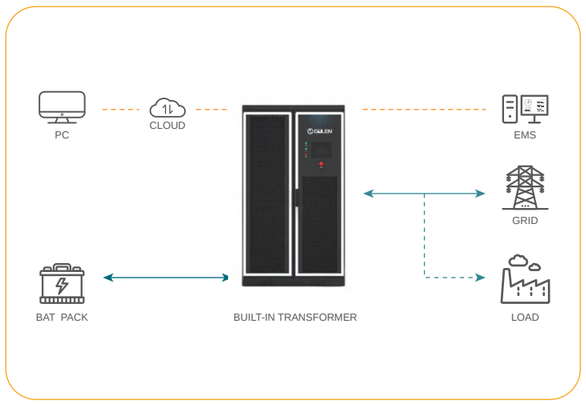
| Model | LEI-50K-TT | LEI-100K-TT | LEI-150K-TT | LEI-250K-TT | LEI-500K-TT | LEI-630K-TT |
|---|---|---|---|---|---|---|
| **Grid Connection Parameters** | | | | | | |
| Max. Output Power [kVA] | 55 | 110 | 165 | 275 | 550 | 630 |
| Rated Output Power [kW] | 50 | 100 | 150 | 250 | 500 | 693 |
| Rated Grid Voltage [V] | 400 | | | | | |
| Rated Output Current [A] | 72 | 144 | 216 | 361 | 722 | 909 |
| Rated Grid Frequency [Hz] | 50/60 | | | | | |
| Grid Frequency Range [Hz] | 45~55/55~65 | | | | | |
| THDi | <3%(@Rated Power) | | | | | |
| AC System | 3/N/PE,230/400 | | | | | |
| Isolation Transformer Ratio | 400/400 | 400/400 | 270/400 | 270/400 | 315/400 | 315/400 |
| **AC (Off-Grid) Parameters** | | | | | | |
| Max. Output Power [kVA] | 55 | 110 | 165 | 275 | 550 | 630 |
| Rated Output Power [kW] | 50 | 100 | 150 | 250 | 500 | 693 |
| Rated Output Voltage [V] | 400 | | | | | |
| Rated Output Current [A] | 72 | 144 | 216 | 361 | 722 | 909 |
| THDu | <3%(@Linear Load) | | | | | |
| Rated Output Frequency [Hz] | 50/60 | | | | | |
| Overload Capacity | 110% Long term,120% 1 minute | | | | | |
| **Photovoltaic Input** | | | | | | |
| Max. PV Input Voltage [V] | 850 | | 1000 | | | |
| Max. Photovoltaic Power [kW] | 60 | 90 | 120/180/240 | 300/360 | 600/660/720 | 600/660/720 |
| MPPT Number of Channels | 3 | 3 | 2/3/4 | 5/6 | 10/11/12 | 10/11/12 |
| MPPT Voltage Range [V] | 850 | | 250~850 | | | |
| **Battery** | | | | | | |
| Battery Voltage Range [V] | 320~600 | 400~600 | 420~850 | 420~850 | 500~850 | 500~850 |
| Max. Charging Power [kW] | 66 | 110 | 120/180/240 | 300/360 | 600/660/720 | 600/660/720 |
| **General Parameters** | | | | | | |
| Operating Temperature [℃] | -30~55 | | | | | |
| Relative Humidity | 0 ~95%,Non-condensing | | | | | |
| Protection Level | IP20 | | | | | |
| Noise [dB] | <70 | | | | | |
| Max. Operating Altitude [m] | < 5000( > 3000 Derating) | | | | | |
| Cooling Method | Air cooling | | | | | |
| Display | LCD touch screen | | | | | |
| BMS Communication | RS485,CAN | | | | | |
| EMS Communications | RS485,TCP/IP | | | | | |
| Weight [kg] | ≈800 | ≈900 | ≈1200/1230/1360 | ≈1900/1930 | ≈3100/3130/3160 | ≈3300/3330/3360 |
| Dimensions (W*D*H) [mm] | 950*700*2000 | 1200*800*2000 | 1200*800*2000 | (600*800*2100) *1 +1200*800*2100 | (600*800*2100) *2 +1600*1050*2100 | (600*800*2100) *2 +1600*1050*2100 |

# COMMERCIAL PCS

## LEG-50K/100K/250K/500K/630K-TT

- Utility frequency topology Strong impact resistance
- AC and DC dual power backup ensures power supply to the control system
- Suitable for normal use in high altitude and cold areas
- Support seamless switching between on-grid and off-grid
- Integrated design, Internally integrated interfaces of photovoltaic, battery, grid, and load
- DC coupled design High system efficiency
- Support three-phase 100% Unbalanced load

Microgrid PV power station Factory Farm Mine Hospital

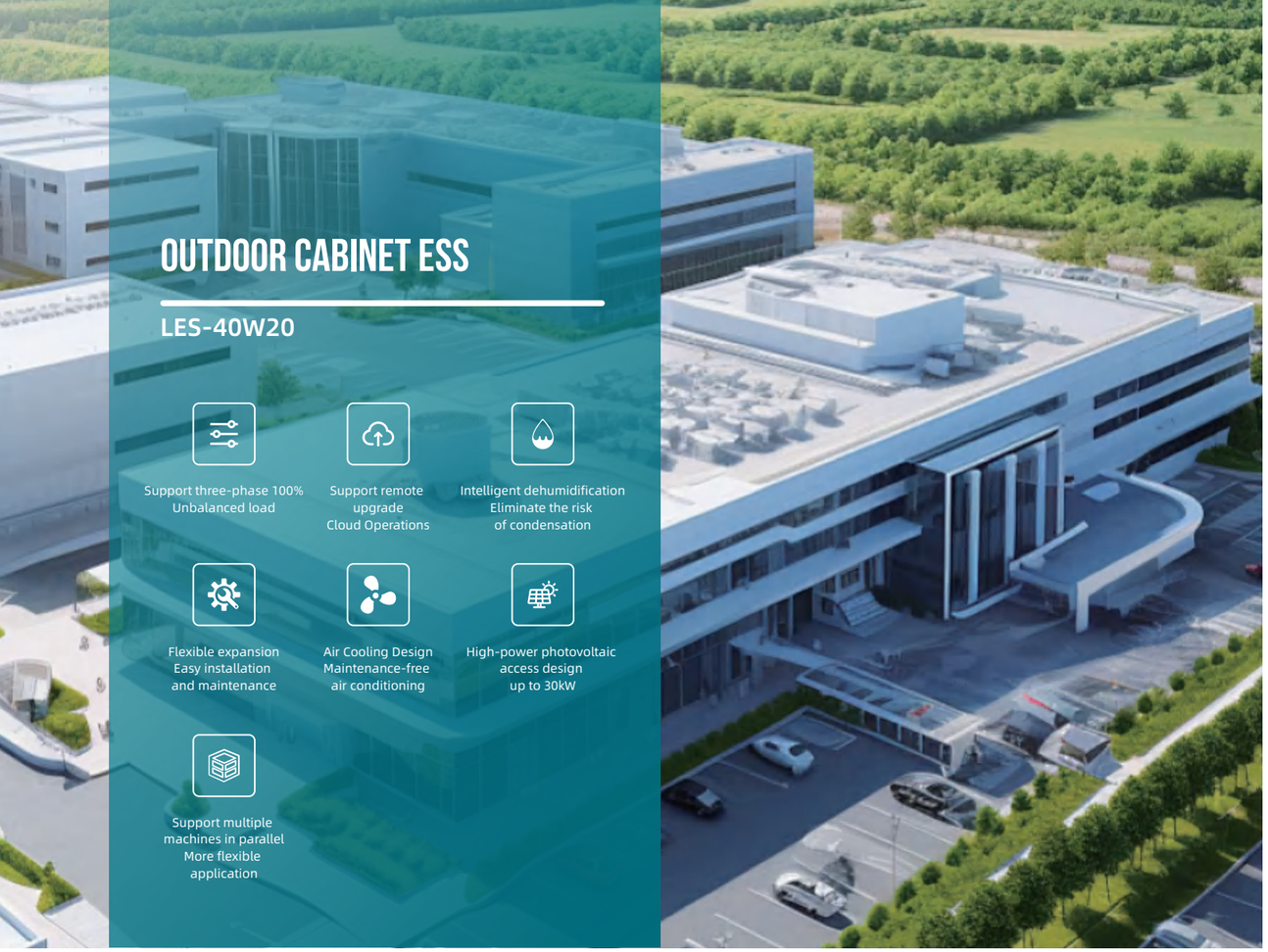



【Built-in Transformer】





| Model | LEG-50K-TT | LEG-100K-TT | LEG-250K-TT | LEG-500K-TT | LEG-630K-TT |
|---|---|---|---|---|---|
| **DC Side Parameters** | | | | | |
| Max. DC Voltage [V] | 850 | | | | |
| DC Voltage Range [V] | 600~880 | | | 650~880 | |
| **AC Output (On Grid)** | | | | | |
| RatedOutputPower[kW] | 50 | 100 | 250 | 500 | 630 |
| Max. Output Power [kVA] | 55 | 110 | 275 | 550 | 693 |
| Max. Output Current [A] | 72 | 144 | 360 | 721 | 909 |
| Rated Output Voltage [V] | 400 | | | | |
| Rated Grid Frequency [Hz] | 50/60 | | | | |
| THDu | <3%(@Linear load) | | | | |
| Unbalanced Load Capacity | 100% | | | | |
| **AC Parameters (Off-Grid)** | | | | | |
| Max. Output Power [kVA] | 55 | 110 | 275 | 550 | 630 |
| Rated Output Power [kW] | 50 | 100 | 250 | 500 | 693 |
| Rated Output Voltage [V] | 400 | | | | |
| Rated Output Current [A] | 72 | 144 | 361 | 722 | 909 |
| THDi | < 3%(@Rated Power) | | | | |
| Rated Output Frequency [Hz] | 50/60 | | | | |
| Overload Capacity | 110% Long term,120% 1 minute | | | | |
| **Protection** | | | | | |
| DC Overvoltage Protection | Yes | | | | |
| DC Short Circuit Protection | Yes | | | | |
| AC Overvoltage Protection | Yes | | | | |
| Reverse polarity protection | Yes | | | | |
| Module Temp. Protection | Yes | | | | |
| **System Data** | | | | | |
| Max. Efficiency | 96.0% | | 97.0% | 97.6% | |
| **General Data** | | | | | |
| Isolation Transformer | Yes | | | | |
| Ingress Protection | IP20 | | | | |
| Temp. Range [℃] | -30~+55 | | | | |
| Cooling Method | Temperature-controlled forced air cooling | | | | |
| Relative Humidity | 0~95%,Non-condensing | | | | |
| Display Mode | Touch screen | | | | |
| Communication | RS485/CAN/Ethernet | | | | |
| Communication Protocol | Modbus-RTU/TCP | | | | |
| Altitude [m] | 5000( > 2000 Derating) | | | | |
| Weight [kg] | ≈650 | ≈750 | ≈1600 | ≈3000 | ≈3200 |
| Dimension (W*D*H) [mm] | 1000*800*2015 | | 1000*1050*2260 | 2100*1050*2260 | 2400*1050*2260 |



# OUTDOOR CABINET ESS

## LES-40W20

Support three-phase 100% Unbalanced load

Support remote upgrade Cloud Operations

Intelligent dehumidification Eliminate the risk of condensation

Flexible expansion Easy installation and maintenance

Air Cooling Design Maintenance-free air conditioning

High-power photovoltaic access design up to 30kW

Support multiple machines in parallel More flexible application

PV power station

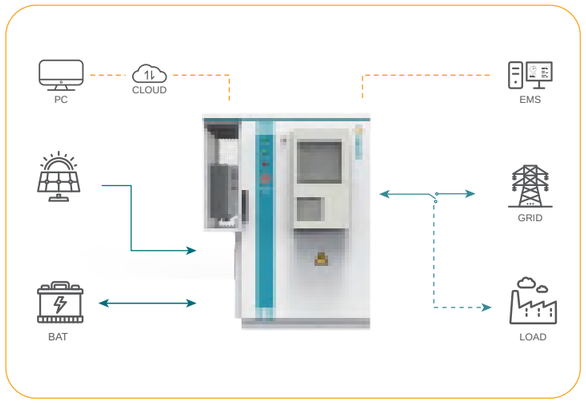
Wind Power Energy Storage

Industrial and Commercial

Grid-Side

Hybrid charging

Microgrid








| Model | LES-40W20 |
|---|---|
| **Battery** | |
| Battery Type | LiFePO4 |
| Rated Charge/Discharge Performance | 0.5C |
| Rated Voltage [V] | 409.6 |
| OperatingVoltage [V] | 358.4~467.2 |
| Cell Rated Capacity [Ah] | 50Ah |
| Rated Capacity [kWh] | 40 |
| Composition | 2P128S |
| **PV Side Parameters** | |
| Max. Recommended PV Power [Wp] | 30000 |
| Max. Input Voltage [V] | 1000 |
| Start-up Voltage [V] | 200 |
| MPPT Voltage Range [V] | 180~960 |
| MPPT Voltage for Full Load [V] | 450~850 |
| Rated Input Voltage [V] | 600 |
| MPPT Number | 2/2 |
| Max. Input Current [A] | 50(25/25) |
| **AC Parameters** | |
| Rated Output Power [kW] | 20 |
| Max. Output Current [A] | 31.8 |
| Rated Grid Voltage [V] | 3/N/PE,230/400 |
| Rated Grid Frequency [Hz] | 50/60 |
| THDu | <3%(@Liner Load) |
| Power Factor | 1(0.9 Leading~0.9 Lagging) |
| THDi | <3%(@Rated Power) |
| **General Data** | |
| Ingress Protection | IP54 |
| Communication | RS485、CAN |
| Communication Protocol | Modbus、IEC104 |
| Temp. Range [℃] | -20~+50 |
| Cooling Method | Air cooling system |
| Fire Fighting System | Aerosol |
| Altitude [m] | 4000( > 2000 Derating) |
| Delivery Method | Integral transportation |
| Relative Humidity | 0~95%, Non-condensing |
| Weight [kg] | ≈2250 |
| Dimension (W*D*H) [mm] | 1395（1075）*1000*1800 |

# OUTDOOR CABINET ESS

## LES-100W50

Support three-phase 100% Unbalanced load

Support remote upgrade Cloud Operations

Intelligent dehumidification Eliminate the risk of condensation

Flexible expansion Easy installation and maintenance

Air Cooling Design Maintenance-free air conditioning

High-power photovoltaic access design up to 100kW

Support multiple machines in parallel More flexible application

PV power station

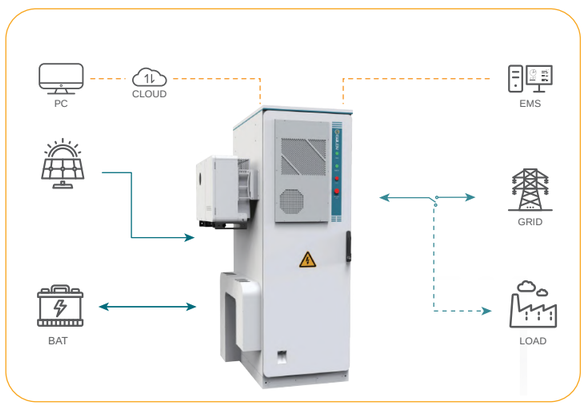
Wind Power Energy Storage

Industrial and Commercial

Grid-Side

Hybrid charging

Microgrid








| Model | LES-100W50 |
|---|---|
| **Battery** | |
| Battery Type | LiFeP4 |
| Battery Capacity [V/Ah] | 3.2/280 |
| System Battery Configuration | 1P112S |
| Battery Rated Capacity [kWh] | 100.35 |
| Battery Rated Voltage [V] | 358.4 |
| Battery Voltage Range [V] | 313.6-408.8 |
| Charge and Discharge Rate [C] | Rated 0.5C |
| Discharge Depth | 95% |
| Battery Cooling Method | Air cooling |
| **Photovoltaic Side Parameters** | |
| Max. Input Power [kW] | 100 |
| Max. Input Voltage [V] | 1100 |
| Rated DC Input Voltage [V] | 620 |
| MPPT Operating Voltage Range [V] | 180~1000 |
| MPPT Number | 2/2 |
| Max. Input Current [A] | 4*40 |
| Max. Short Circuit Current [A] | 4*50 |
| **AC Output (On-Grid)** | |
| Rated Output Power [kW] | 50 |
| AC Output Power [kVA] | 55 |
| Working Phase | 3W/N/PE |
| Rated Mains Voltage [V/V] | 220/380,230/400 |
| Rated Mains Frequency [Hz] | 50/60 |
| Rated AC Output Current | 72.2 |
| Max. Output Current A | 83.3 |
| Power Factor | 1 (0.9 Leading - 0.9 Lagging) |
| Harmonic Rate | <3% |
| **AC Output (Load Side)** | |
| Working Phase | 3W/N/PE |
| Rated Mains Voltage [V/V] | 220/380,230/400 |
| Rated Input Frequency [Hz] | 50/60 |
| **AC Output (Off-Grid)** | |
| Rated Output Power [kW] | 50 |
| Max. AC Output Power | 1.5 times output 10S |
| Backup Power Switching Time [ms] | <10 |
| Working Phase | 3W/N/PE |
| Rated Mains Voltage [V/V] | 220/380,230/400 |
| Rated Frequency [Hz] | 50/60 |
| Rated Output Current [A] | 72.2 |
| Total Voltage Distortion rate | <3%(@Rated Power) |
| **Generator Input Parameters** | |
| Max. Input Power [kW] | 50 |
| Max. Input Current | 166.7/75.7 |
| Working Phase | 3W/N/PE |
| Rated Mains Voltage [V/V] | 220/380,230/400 |
| Rated Input Frequency [Hz] | 50/60 |
| **System Parameters** | |
| Protection Level | IP54 |
| Anti-corrosion level | C4 |
| Operating Temperature Range [℃] | -20~55 |
| Storage Temperature Range [℃] | -30~55 |
| Operating Temperature Range | ≤100% |
| Battery Temperature Control Method | Air Cooling |
| Fire Fighting System | Aerosol |
| Max. Perating Altitude [m] | ≤3000 |
| Communication Protocol | CAN,RS485,WiFi |
| Communication Interface | Ethemet/RS485/CAN |
| Weight [kg] | ≈1500 |
| Dimension (W*D*H) [mm] | 700*1150*2250 |

# OUTDOOR CABINET ESS

## LES-200W100 LES-215W100

Supports 100% three-phase unbalanced load

Support remote upgrade Cloud operation and maintenance

Intelligent dehumidifcation Eliminates the risk of condensation

Flexible expansion Easy installation and maintenance

Air Cooling Design Maintenance-free air conditioning

PV power station

Wind power station

Industrial and commercial

Grid side

Hybrid charging

Microgrid


【Fan Cooling System】

| Model | LES-200W100 | LES-215W100 |
|---|---|---|
| **Battery** | | |
| Battery Type | LiFePO4 | |
| Rated Charge/Discharge Performance | ≤0.5C | |
| Rated Voltage [V] | 716.8 | 768 |
| Operating Voltage Range [V] | 627.2~817.6 | 672~876 |
| Cell Rated Capacity [Ah] | 280 | 280 |
| Rated Capacity [kWh] | 200.7 | 215.04 |
| Composition | 1P224S | 1P240S |
| **AC Output (Grid Side)** | | |
| Rated Output Power [kW] | 100 | |
| Max. Output Current [A] | 159 | |
| Rated Grid Voltage [V] | 3/N/PE,230/400 | |
| Rated Grid Frequency [Hz] | 50/60 | |
| Power Factor | >0.99 | |
| Power Factor Adjustable Range | 1(0.9 Leading~0.9 Lagging ) | |
| THDu | <3%(@ Liner Load ) | |
| THDi | <3%（@ Rated Power） | |
| **AC Output (Load Side)** | | |
| Rated Output Power [kW] | 100 | |
| Max. Output Current [A] | 159 | |
| Rated Output Voltage [V] | 3/N/PE,230/400 | |
| Rated Output Frequency [Hz] | 50/60 | |
| Unbalanced Load Capacity | 100% | |
| **General Data** | | |
| Ingress Protection | IP54 | |
| Battery Cooling Method | Air conditioning cooling | |
| Fire Fighting System | Yes | |
| Relative Humidity | 0~95%,Non-condensing | |
| Temp. Range [℃] | -20~+50 | |
| Altitude [m] | 4000（＞2000 Derating） | |
| Communication | RS485、CAN | |
| Communication Protocol | Modbus、IEC104 | |
| Weight [kg] | ≈2200 | ≈2450 |
| Dimension (W*D*H) [mm] | 1550*1235(1050)*2264 | |
| Delivery Method | Integral transportation | |

# OUTDOOR CABINET ESS

## LES-215L100 LES-233L100 LES-241L120 LES-261L130

Supports 100% three-phase unbalanced load

Floor space < 1.4m²

Support remote upgrade Cloud operation and maintenance

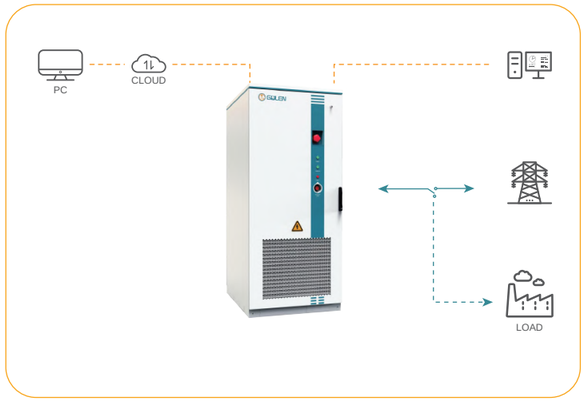
PACK plus cabin fire, safe and controlled

Intelligent dehumidifcation Eliminates the risk of condensation

PACK-level liquid-cooled runner desgin for high cooling efficiency

Single cabinet capacity up to 261KWh

Flexible expansion Easy to install and maintain


【Liquid Cooling System】

| Model | LES-215L100 | LES-233L100 | LES-241L120 | LES-261L130 |
|---|---|---|---|---|
| **Battery** | | | | |
| Battery Type | LiFePO4 | | | |
| Rated Charge/Discharge Performance | 0.5C | 0.5C | 0.5C | 0.5C |
| Rated Voltage [V] | 768 | 832 | 768 | 832 |
| Operating Voltage [V] | 672~876 | 728~949 | 672~876 | 728~949 |
| Cell Rated Capacity [Ah] | 280 | 280 | 314 | 314 |
| Rated Capacity [kWh] | 215.04 | 232.96 | 241.15 | 261.248 |
| Composition | 1P240S | 1P260S | 1P240S | 1P260S |
| **AC Output (On Grid)** | | | | |
| Rated Output Power [kW] | 100 | | 120 | 130 |
| Rated Output Current [A] | 159 | | 191 | 206 |
| Rated Grid Voltage [V] | 3/N/PE,230/400 | | | |
| Rated Grid Frequency [Hz] | 50/60 | | | |
| Power Factor | >0.99 | | | |
| Power Factor Adjustable Range | 1(0.9 Leading~0.9 Lagging) | | | |
| DC Component | < 0.5% In | | | |
| THDi | <3%(@Rated Power) | | | |
| **AC Output (Off Grid)** | | | | |
| Rated Output Power [kW] | 100 | | 120 | 130 |
| Max. Output Current [A] | 159 | | 191 | 206 |
| Rated Output Voltage [V] | 3/N/PE,230/400 | | | |
| Rated Output Frequency [Hz] | 50/60 | | | |
| Unbalanced Load Capacity | 100% | | | |
| **General Data** | | | | |
| Ingress Protection | IP54 | | | |
| Cooling Method | Battery Compartment(Liquid Cooled)、Electrical Cabin(Air Cooled) | | | |
| Fire Protection System | Aerosol、Perfluorohexanone | | | |
| Relative Humidity | 0~95%,Non-condensing | | | |
| Temp. Range [℃] | -20~+50 | | | |
| Altitude [m] | 4000( > 2000 Derating) | | | |
| Communication | RS485、CAN | | | |
| Communication Protocol | Modbus、IEC104 | | | |
| Weight [kg] | ≈2600 | ≈2700 | ≈2700 | ≈2800 |
| Dimension (W*D*H) [mm] | 1000*1330*2350 | 1000*1400*2400 | 1000*1330*2350 | 1000*1400*2400 |
| Delivery Method | Integral transportation | | | |

# OUTDOOR CABINET ESS

## LES-372L200 LES-418L209

Supports 100% three-phase unbalanced load

PACK level liquid cooled runner design for heat dissipation

Support remote upgrade Cloud operation and maintenance

PACK plus cabin fire, safe and controlled

Intelligent dehumidifcation Eliminates the risk of condensation

Single cabinet capacity up to 418KWh

Flexible expansion Easy to install and maintain

PV power station

Wind power station

Industrial and commercial

Grid side

Hybrid charging

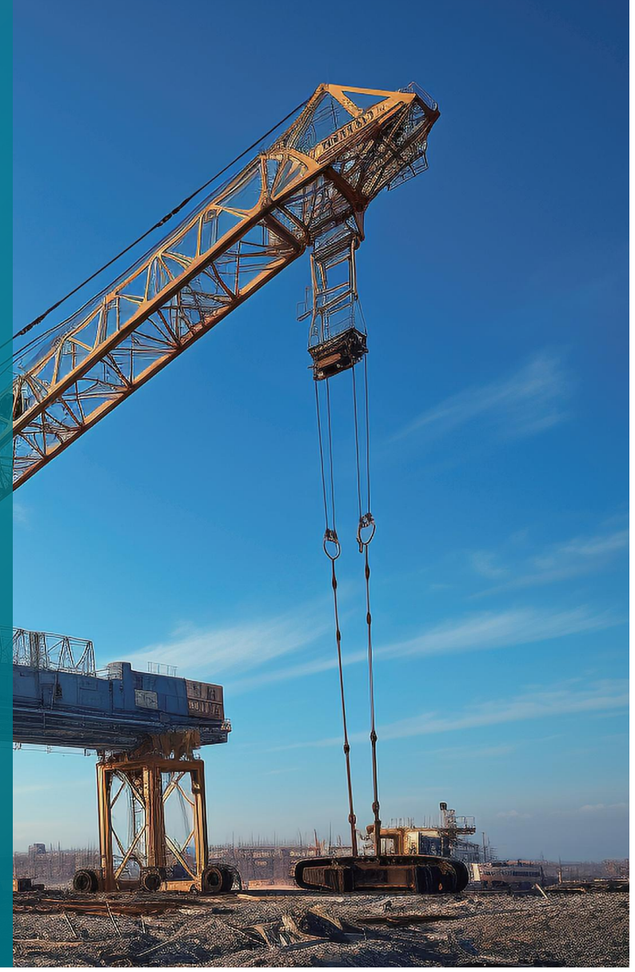
Microgrid


【Liquid Cooling System】

| Model | LES-372L186 | LES-418L209 |
|---|---|---|
| **Battery** | | |
| Battery Type | LiFePO4 | |
| Rated Charge/Discharge Performance | 0.5C | |
| Rated Voltage [V] | 1331.2 | |
| Operating Voltage [V] | 1164.8~1497.6 | |
| Cell Rated Capacity [Ah] | 280 | 314 |
| Rated Capacity [kWh] | 372.73 | 417.99 |
| Composition | 1P416S | 1P416S |
| **AC Output (On Grid)** | | |
| Rated Output Power [kW] | 186 | 209 |
| Rated Output Current [A] | 155.64 | 175 |
| Rated Grid Voltage [V] | 3/PE,690 | |
| Rated Grid Frequency [Hz] | 50/60 | |
| DC Component | <0.5%In | |
| Power Factor | 1(0.9 Leading~0.9 Lagging) | |
| THDi | <3%(@Rated Power) | |
| **General Data** | | |
| Ingress Protection | IP54 | |
| Cooling Method | Battery Compartment (Liquid Cooled)、Electrical Cabin(Air Cooled) | |
| Battery Cooling Method | Liquid cooling system | |
| Fire Protection System | Perfluorohexanone | |
| Relative Humidity | 0~95%,Non-condensing | |
| Temp. Range [℃] | -20~+50 | |
| Altitude [m] | 4000( > 2000 Derating) | |
| Communication | RS485、CAN | |
| Communication Protocol | Modbus、IEC104 | |
| Weight [kg] | ≈3600 | ≈3750 |
| Dimension (W×D×H) [mm] | 1325*1375*2300 | 1325*1375*2300 |
| Delivery Method | Integral transportation | |

# MOBILE ENERGY STORAGE SYSTEM

**10ft ESS:**
**LES-H10-120M1P/250M2P/360M3P**
**LES-H10-250M2P/250M3P**



All-in-one design for easy transportation and installation, flexible deployment

Separation of electrical and battery compartments to prevent thermal runaway from spreading

Multiple capacity designs Meets the needs of multiple applications

Supports PV DC access

Multiple quick-connect port design
Meet the needs of different scenarios for quick connection

PV power station

Wind power station

Industrial and commercial

Grid side

Hybrid charging

Microgrid




GOLEN

| Model | LES-H10-120M1P | LES-H10-240M2P | LES-H10-360M3P | LES-H10-250M2P | LES-H10-250M3P |
|---|---|---|---|---|---|
| **Battery** | | | | | |
| Battery Type | LiFePO4 | | | | |
| Rated Charge/Discharge Performance | ≤0.5C | | | | |
| Rated Voltage [v] | 768 | | | | |
| Operating Voltage Range [V] | 672-876 | | | | |
| Cell Rated Capacity [Ah] | 314 | | | | |
| Rated Capacity [kWh] | 241 | 482 | 723 | 482 | 723 |
| Composition | 1P240S | (1P240S) *2P | (1P240S) *3P | (1P240S) *2P | (1P240S) *3P |
| **AC Data(On-Grid)** | | | | | |
| Rated Charge and Discharge Power [kW] | 120 | 240 | 360 | 250 | |
| Max. AC Current [A] | 191 | 382 | 572 | 397 | |
| Rated Output Voltage [V] | 3/N/PE,230/400V | | | | |
| Rated Frequency [Hz] | 50/60 | | | | |
| THDu | < 3%(@Linear Load) | | | | |
| Power Factor | 1(0.8 Leading -0.8 Lagging) | | | | |
| THDi | < 3%(@Rated Power) | | | | |
| **AC Data (Off Grid)** | | | | | |
| Rated Output Power [kW] | 120 | 240 | 360 | 250 | |
| Max. Output Current [A] | 191 | 382 | 572 | 397 | |
| Rated Output Voltage [V] | 3/N/PE,230/400 | | | | |
| Rated Output Frequency [Hz] | 50/60 | | | | |
| Unbalanced Load Capacity | 100% | | | | |
| **General Data** | | | | | |
| Ingress Protection | IP54 | | | | |
| Communication | CAN, RS485, Ethernet port | | | | |
| Communication Protocol | Modbus、IEC104 | | | | |
| Working Environment Temperature[℃] | -20~+50 | | | | |
| ElectricalCabinCoolingMethod | Air cooling | | | | |
| ElectricalCabinCoolingMethod | Liquid cooling | | | | |
| Fire Fighting System | 1230 Fire fighting system | | | | |
| Relative Humidity [℃] | 0-95%,Non-condensing | | | | |
| Altitude [m] | 5000( > 2000 Derating) | | | | |
| Delivery Mode | Integral transportation | | | | |
| Weight [T] | ≈ 5.8 | ≈ 7.8 | ≈9.6 | ≈8.1 | ≈9.9 |
| Dimension (W*D*H) [mm] | 2991*2438*2896 | | | | |
| Application environment | Outdoor | | | | |
| Noise [dB] | ≤75 | | | | |

*Products of other specifications can be customized according to customer requirements

# CONTAINER ENERGY STORAGE SYSTEM

**20ft BESS:**
**LBS-G20-HV**

- Integrated system solution without on-site installation and commissioning
- Separation of electrical and battery compartments to prevent thermal runaway from spreading
- Multiple capacity designs Meets the needs of multiple applications
- Multi-protection design Higher security

PV power station · Wind power station · Industrial and commercial · Grid side · Hybrid charging · Microgrid


| Model | LBS-G20-HV | |
|---|---|---|
| **Battery** | | |
| Battery Type | LiFePO4 | |
| Rated Charge/Discharge Performance | ≤0.5C | |
| Nominal Voltage [V] | 1331.2 | |
| Operating Voltage Range [V] | 1164.8~1497.6V | |
| Cell Rated Capacity [Ah] | 314 | |
| Rated Capacity [kWh] | 4179.97 | 5015.96 |
| Composition | (1P416S)*10P | (1P416S)*12P |
| **General Data** | | |
| Ingress Protection | IP55 | |
| Cooling Method | Liquid cooling | |
| Fire Fighting System | Aerosol/Perfluorohexanone | |
| Relative Humidity | 0~95%,Non-condensing | |
| Temp. Range [℃] | -20~+50 | |
| Altitude [m] | 5000( > 2000 Derating) | |
| Communication | CAN、RS485 | |
| Communication Protocol | Modbus、IEC104 | |
| Weight [T] | ≈39.5 | ≈45 |
| Dimension (W*D*H) [mm] | 6058*2438*2896 | |
| Delivery Method | Integral transportation | |
| **Product Certifications** | | |
| Certificates | IEC 62619,IEC 62477,IEC 63056,IEC 61000,UL 1973,UL 9540A,NFPA 855 | |
| Safe Transportation | UN3536、UN38.3 | |

| Model | LEG-1250-UD-35 | LEG-2500-UD-35 | LEG-5000-UD-35 |
|---|---|---|---|
| **Technical Specifications** | | | |
| Rated Output Power [kW] | 1250 | 2500 | 5000 |
| Rated AC Voltage [kV] | 35 | | |
| Rated Grid Frequency [Hz] | 50/60 | | |
| THD (Rated Power) | < 3% | | |
| Adjustable Power Factor Range | -1~+1 | | |
| **Transformer Parameters** | | | |
| Rated Power [kVA] | 1250 | 2500 | 5000 |
| Voltage Ratio [kV/kV] | 0.69/6~35 | | |
| Vector Group | DY11 | | |
| Transformer Type | Dry type transformer/Oil type transformer | | |
| **Basic Parameters** | | | |
| Protection Class | IP54 | | |
| Relative Humidity Range | 0-100%Without condensation | | |
| Maximum Operating Altitude [m] | 5000 | | |
| Communication Interface | RS485,Etherne,CAN | | |
| Communication Protocol | Modbus TCP,IEC104,IEC61850 | | |
| Weight [t] | ≈14 | ≈16 | ≈22.5 |
| Dimensions (W*D*H) [mm] | 6058*2438*2896 | 6058*2438*2896 | 12192*2438*2896 |

* Grid side voltage 6-35kV optional.The size and parameters of customized models are subject to change, and the latest information of our company shall prevail without further notice.

# RESIDENTIAL HYBRID INVERTER

## LEI-3K/5K/6K-SL-A

On/Off Gird Seamless Switching

Simply Design Easy To Install

Wide Voltage DC Design

Multiple Operation Modes

Remote Monitoring By Computer & Cell phone

Villa

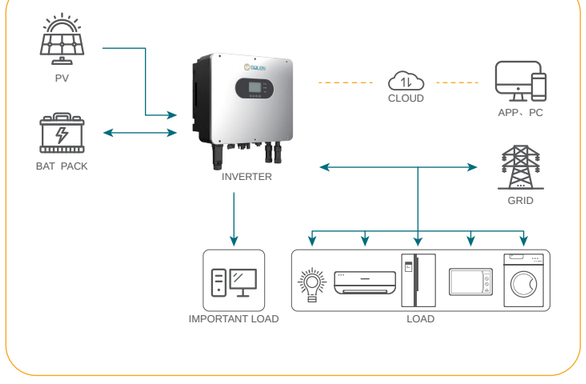
Hotel

Residential electricity

Hospital

Museum

Church




【Single Phase】【2MPPT】





| Model | LEI-3K-SL-A | LEI-5K-SL-A | LEI-6K-SL-A |
|---|---|---|---|
| **PV Input** | | | |
| Max. Recommended PV Power [Wp] | 4600 | 6500 | 7200 |
| Max. Input Voltage [V] | | 580 | |
| MPPT Voltage Range [V] | | 125~550 | |
| Rated Input Voltage [V] | | 390 | |
| MPPT Number | | 2/1 | |
| Max. Input Current [A] | | 13.5/13.5 | |
| **Battery** | | | |
| Charge/Discharge Current [A] | 80 | 100 | |
| Battery Voltage Range [V] | | 40~58 | |
| Battery Type | | Lithium | |
| **AC Output (On Grid)** | | | |
| Max. Output Power [W] | 3000 | 5000 | 6000 |
| Max. Output Current [A] | 13 | 21.7 | 26 |
| Rated Grid Voltage [V] | | L/N/PE,230 | |
| Grid Voltage Range [V] | | 176~270 | |
| Rated Grid Frequency [Hz] | | 50/60 | |
| Power Factor | | 1(0.8 Leading~0.8 Lagging) | |
| THDi | | < 3%(@ Rated Power) | |
| **AC Output (Off Grid)** | | | |
| Max. Output Power [W] | 3000 | 5000 | 6000 |
| Max. Output Current [A] | 13 | 21.7 | 26 |
| Rated Output Voltage [V] | | 230 | |
| Rated Voltage Frequency [Hz] | | 50/60 | |
| THDu | | < 3%(@ Linear Load) | |
| Switch Time | | < 20ms | |
| **Efficiency** | | | |
| Max. Efficiency | | 97.6% | |
| **General Data** | | | |
| Protection | | DC Reverse Connection Protection,Battery Reverse Polarity Protection,Over-current Voltage Protection,Anti-island Protection,AC Short Circuit Protection,Leakage Current Protection,Grounding Detection,Insulation Resistor Protection | |
| Ingress Protection | | IP65 | |
| Cooling Method | | Natural cooling | |
| Relative Humidity | | 0~95% | |
| Temp. Range [℃] | | -25~60 | |
| Altitude [m] | | 4000( >2000 Derating) | |
| Noise [dB] | | < 35 | |
| Display | | LCD | |
| Communication | | RS485/CAN/WIFI/GPRS/DRM | |
| Weight [kg] | | 26 | |
| Dimension (W*D*H) [mm] | | 515*200*550 | |
| Installation Style | | Wall mounted | |

# RESIDENTIAL HYBRID INVERTER

## LEI-4K/5K/6K/8K/10K-TL-A

On/Off Gird
Seamless Switching

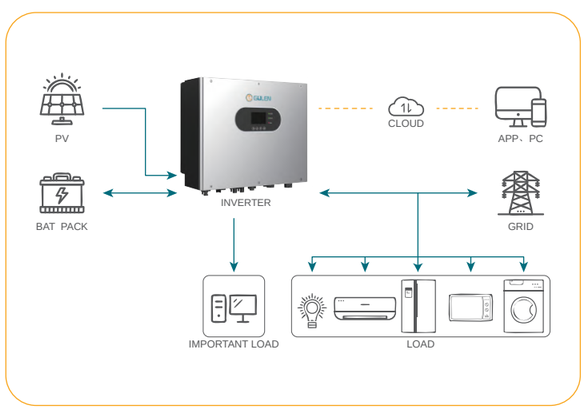
Simply Design
Easy To Install

Wide Voltage
DC Design

Multiple Operation
Modes

Remote Monitoring
By Computer & Cell phone

Independent output of
each phare
(100% unbalance)


【Three Phase】【2MPPT】



GOLEN

| Model | LEI-4K-TL-A | LEI-5K-TL-A | LEI-6K-TL-A | LEI-8K-TL-A | LEI-10K-TL-A |
|---|---|---|---|---|---|
| **PV Input** | | | | | |
| Max. Recommended PV Power [Wp] | 6000 | 7500 | 9000 | 12000 | 15000 |
| Max. Input Voltage [V] | 1000 | | | | |
| Start-up Voltage [V] | 200 | | | | |
| MPPT Voltage Range [V] | 180~960 | | | | |
| MPPT Working Voltage For Full Load [V] | 220~850 | 250~850 | 320~850 | 360~850 | 450~850 |
| Rated Input Voltage [V] | 600 | | | | |
| MPPT Number | 2/1 | | | | |
| Max. Input Current [A] | 25(12.5/12.5) | | | | |
| **Battery** | | | | | |
| Battery Type | Lithium | | | | |
| Number Of Battery Input | 1 | | | | |
| Battery Voltage Range [V] | 180~800 | | | | |
| Battery Voltage Range For Full Load [V] | 200~800 | 200~800 | 240~800 | 320~800 | 400~800 |
| Max Charge/Discharge Current [A] | 25 | | | | |
| Communication | CAN/RS485 | | | | |
| Charging Strategy For Battery | According to BMS Instructions/3 Stages(Lead-acid) | | | | |
| **AC Output (On Grid)** | | | | | |
| Rated Output Power [W] | 4000 | 5000 | 6000 | 8000 | 10000 |
| Max. Output Power [VA] | 4400 | 5500 | 6600 | 8800 | 11000 |
| Rated Output Voltage [Vac] | 3/N/PE，220/380，230/400 | | | | |
| Max. Output Current [A] | 6.5 | 8 | 10 | 13 | 16 |
| AC Output Frequency [Hz] | 50/60(45~55/55~65) | | | | |
| Power Factor | 1(0.8 Leading~0.8 Lagging) | | | | |
| THDi | < 3%(@ Rated Power) | | | | |
| **Backup AC Output（EPS）** | | | | | |
| Rated Output Power [VA] | 4000 | 5000 | 6000 | 8000 | 10000 |
| Max. Output Power [VA] | 4400 60s,6000 1s | 5500 60s,7500 1s | 6600 60s,9000 1s | 8800 60s,12000 1s | 11000 60s,15000 1s |
| Max. Output Current [A] | 6.5 | 8 | 10 | 13 | 16 |
| Rated Output Voltage [Vac] | 3/N/PE,220/380,230/400 | | | | |
| Output Frequency [Hz] | 50/60(±0.2%) | | | | |
| THDu | <3% | | | | |
| Switch Time | <20ms | | | | |
| **Efficiency** | | | | | |
| Max. Efficiency | 98.0% | | | | |
| **General Data** | | | | | |
| Protection | DC Lightning Protection,AC Lightning Protection,PV Reverse Polarity Protection,Battery Reverse Polarity Protection,Insulation Resistance Detection,Leakage Current Detection,Anti-island Protection,Grounding Fault,Input Over&Under Voltage,Output Over&Under Voltage,Input&Output Overcurrent,Overheat Protection | | | | |
| Ingress Protection | IP65 | | | | |
| Cooling Method | Natural cooling | | | | |
| Relative Humidity | 0~95% | | | | |
| Temp. Range [℃] | -25~+60 | | | | |
| Altitude [m] | 4000(>2000 Derating) | | | | |
| Noise [dB] | <40 | | | | |
| Standby Self Consumption [W] | <10 | | | | |
| Display | LCD | | | | |
| Communication | RS485/CAN(Standard)； Wi-Fi(Option) | | | | |
| BMS Communication | RS485/CAN | | | | |
| Weight [kg] | 26 | | | | |
| Dimension (W*D*H) [mm] | 540*240*450 | | | | |
| Installation Style | Wall mounted | | | | |

# RESIDENTIAL HYBRID INVERTER

## LEI-10K/12K/15K/20K-TL

On/Off Gird
Seamless Switching

Simply Design
Easy To Install

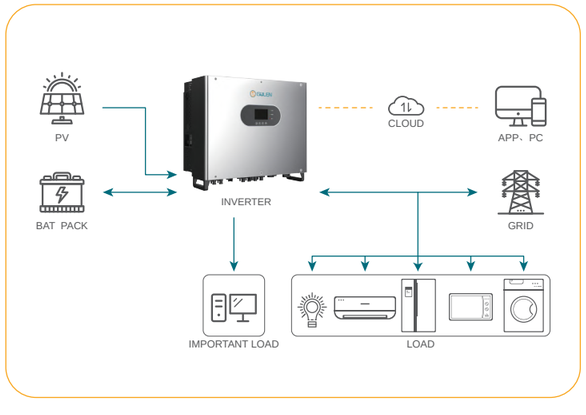
Wide Voltage
DC Design

Multiple Operation
Modes

Remote Monitoring
By Computer & Cell phone

Independent output of
each phare
(100% unbalance)

Villa Hotel Office building Hospital Museum Church




【Three Phase】【2MPPT】



GOLEN

| Model | LEI-10K-TL | LEI-12K-TL | LEI-15K-TL | LEI-20K-TL |
|---|---|---|---|---|
| **PV Input** | | | | |
| Max. Recommended PV Power [Wp] | 15000 | 18000 | 22500 | 30000 |
| Max. Input Voltage [V] | 1000 | | | |
| Start-up Voltage [V] | 200 | | | |
| MPPT Voltage Range [V] | 200~960 | | | |
| MPPT Working Voltage For Full Load [V] | 220~850 | 264~850 | 350~850 | 450~850 |
| Rated Input Voltage [V] | 600 | | | |
| MPPT Number | 2/2 | | | |
| Max. Input Current [A] | 50(25/25) | | | |
| **Battery** | | | | |
| Battery Type | Lithium | | | |
| Number Of Battery Input | 2 | | | |
| Battery Voltage Range [V] | 200~800 | | | |
| Battery Voltage Range For Full Load [V] | 200~800 | 240~800 | 300~800 | 400~800 |
| Max Charge/Discharge Current [A] | 50(25/25) | | | |
| Communication | CAN/RS485 | | | |
| Charging Strategy For Battery | According to BMS Instructions/3 Stages(Lead-acid) | | | |
| **AC Output (On Grid)** | | | | |
| Rated Output Power [W] | 10000 | 12000 | 15000 | 20000 |
| Max. Output Power [VA] | 11000 | 13200 | 16500 | 22000 |
| Rated Output Voltage [Vac] | 3/N/PE,220/380,230/400 | | | |
| Max. Output Current [A] | 16 | 19 | 24 | 32 |
| AC Output Frequency [Hz] | 50/60(45~55/55~65) | | | |
| Power Factor | 1(0.8 Leading~0.8 Lagging) | | | |
| THDi | < 3%(@ Rated Power) | | | |
| **Backup AC Output（EPS）** | | | | |
| Rated Output Power [VA] | 10000 | 12000 | 15000 | 20000 |
| Max. Output Power [VA] | 11000 60s,15000 1s | 13200 60s,18000 1s | 16500 60s,22500 1s | 22000 60s,30000 1s |
| Max. Output Current [A] | 16 | 19 | 24 | 32 |
| Rated Output Voltage [Vac] | 3/N/PE,220/380,230/400 | | | |
| Output Frequency [Hz] | 50/60(±0.2%) | | | |
| THDu | < 3%(@ Linear Load) | | | |
| Switch Time | <20ms | | | |
| **Efficiency** | | | | |
| Max. Efficiency | 98.2% | | | |
| **General Data** | | | | |
| Protection | DC Lightning Protection,AC Lightning Protection,PV Reverse Polarity Protection,Battery Reverse Polarity Protection,Insulation Resistance Detection,Leakage Current Detection,Anti-island Protection,Grounding Fault,Input Over&Under Voltage,Output Over&Under Voltage,Input&Output Overcurrent,Overheat Protection | | | |
| Ingress Protection | IP65 | | | |
| Cooling Method | Smart fan cooling | | | |
| Relative Humidity | 0~95% | | | |
| Temp. Range [℃] | -30~+60 | | | |
| Altitude [m] | 4000( >2000 Derating) | | | |
| Noise [dB] | <45 | | | |
| Standby Self Consumption [W] | <15 | | | |
| Display | LCD | | | |
| Communication | RS485(Standard) ; Wi-Fi(Option) | | | |
| BMS Communication | RS485/CAN | | | |
| Weight [kg] | 45 | | | |
| Dimension (W*D*H) [mm] | 586*270*470 | | | |
| Installation Style | Wall mounted | | | |

# OFF-GRID SOLAR STORAGE AND CHARGING INVERTER

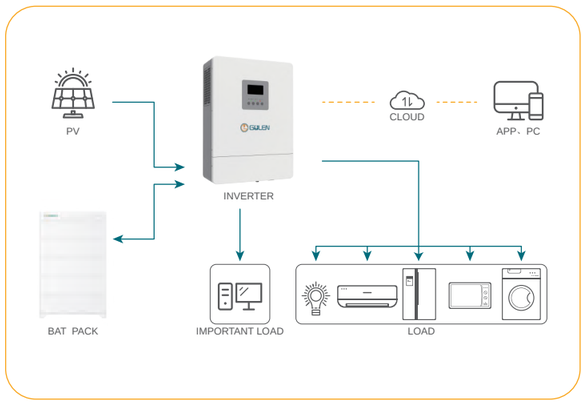
## LNS-3K60/5K80-SD

Easy to Install

Support for various scenarios
Multiple customization modes

Extension Support
Max as 9P

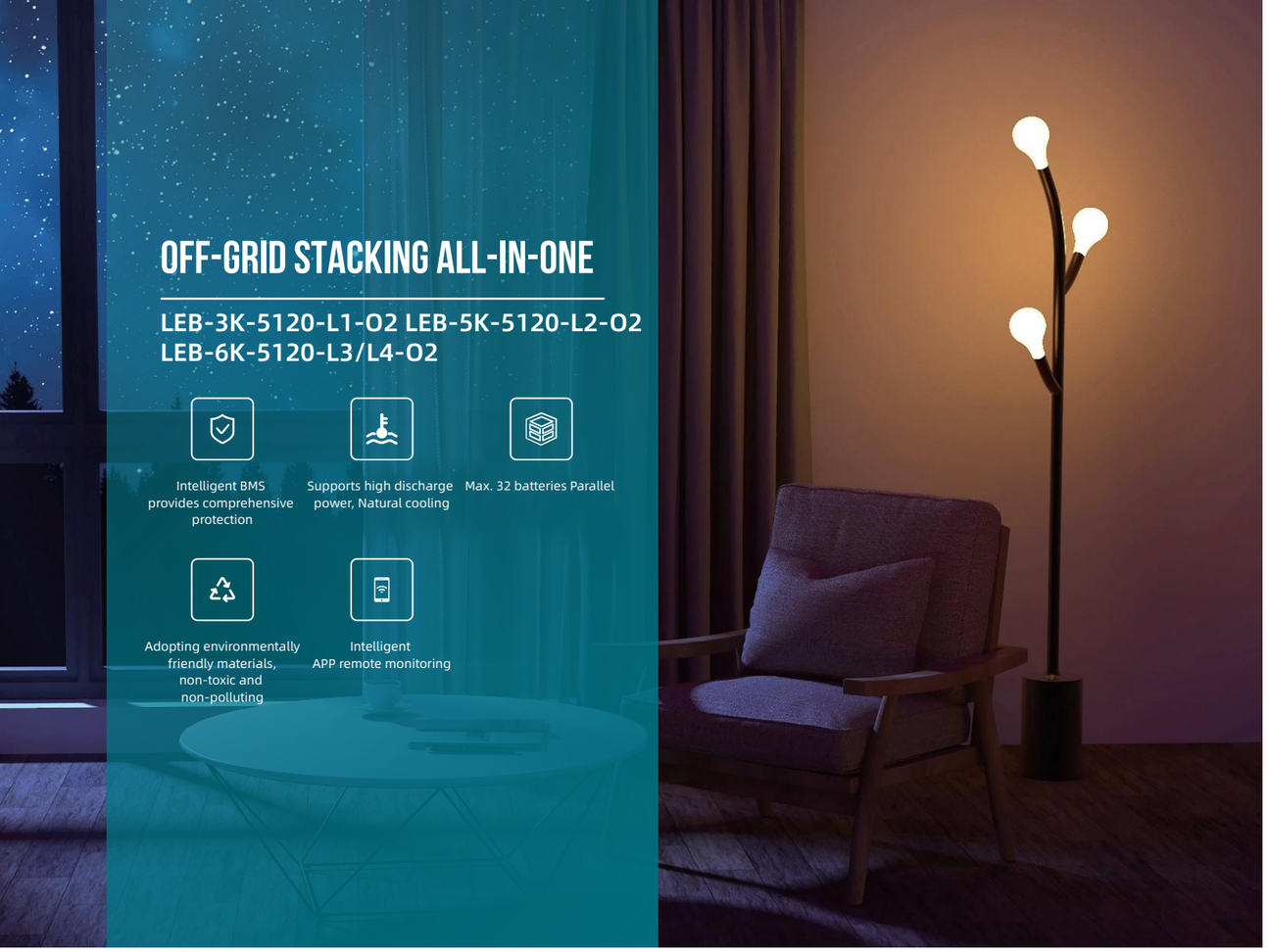
Uninterruptible
power supply.
Switching within 10ms





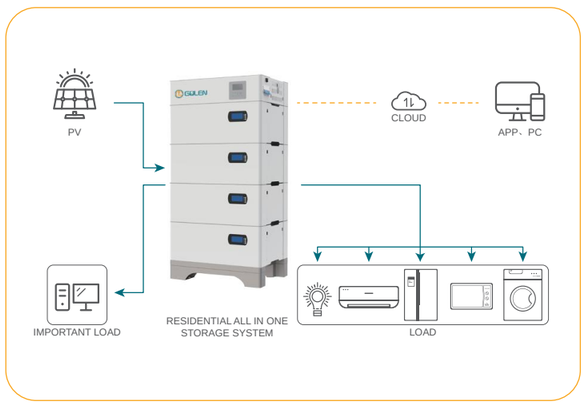

| Model | LNS-3K60-SD | LNS-5K80-SD |
|---|---|---|
| **Photovoltaic Input** | | |
| Max recommended Module power [Wp] | 3000 | 5000 |
| Max. Input Voltage [V] | 500 | |
| MPPT Voltage Range [V] | 120~450 | |
| Rated Input Voltage [V] | 380 | |
| Number of MPPT Paths | 1 | |
| Max. input current [A] | 18 | |
| **Battery** | | |
| Max charge/discharge current [A] | 60/60 | 100/100 |
| Battery voltage range [V] | 40~60 | |
| Compatible battery types | LEP | |
| **AC Input (on grid)** | | |
| Max. output power [W] | / | |
| Max. input current [A] | 40 | |
| Rated grid voltage [V] | 230 | |
| Grid voltage range [V] | 170~280 | |
| Rated grid frequency [Hz] | 50Hz/60Hz(Adaptive) | |
| Power Factor | >0.99 | |
| **AC Output (off-grid)** | | |
| Max. output power [W] | 6000 | 10000 |
| Max. output current [A] | 3000 | 5000 |
| Rated output voltage [V] | 230Vac±5% | |
| Rated voltage frequency [Hz] | 50Hz/60Hz | |
| THDi | < 3%(@ Rated Power) | |
| Switching time | 10 ms(For Personal Computers);20 ms(For Home Appliances) | |
| **Efficiency** | | |
| Max. efficiency | 93% | |
| MPPT efficiency | 99% | |
| **General Data** | | |
| With protection function | Input and output over/under voltage protection,over current protection,overload protection,over temperature protection,short circuit protection and other functions | |
| IP Protection Rating | IP21 | |
| Cooling Method | Fan | |
| Relative humidity | 0~95% ,Non-condensing | |
| Operating temperature [℃] | -10~+50 | |
| Altitude [m] | 2000 | |
| Noise [dB] | ≤60dB | |
| Display | LCD | |
| Communication interface | RS232/CAN/Dry Node control | |
| Weight [kg] | ≈12.4 | |
| Dimensions(W*D*H) [mm] | 412*300*123 | |
| nstallation | Wall mounted | |



# OFF-GRID STACKING ALL-IN-ONE

## LEB-3K-5120-L1-O2 LEB-5K-5120-L2-O2 LEB-6K-5120-L3/L4-O2

- Intelligent BMS provides comprehensive protection
- Supports high discharge power, Natural cooling
- Max. 32 batteries Parallel
- Adopting environmentally friendly materials, non-toxic and non-polluting
- Intelligent APP remote monitoring






| Model | LEB-3K-5120-L1-O2 | LEB-5K-5120-L2-O2 | LEB-6K-5120-L3-O2 | LEB-6K-5120-L4-O2 |
|---|---|---|---|---|
| **PV Input** | | | | |
| Max.recommended module power [Wp] | 3000 | 5000 | 6000 | |
| Max. input voltage [V] | 500 | | | |
| Starting voltage [V] | 100 | | | |
| MPPT voltage range [V] | 80~450 | | | |
| Full load MPPT voltage [V] | 280~400 | | | |
| Number of MPPT paths/number of strings per path | 1/1 | | | |
| Max. input current [A] | 22 | | | |
| **AC Input (Mains Power)** | | | | |
| Rated input voltage [V] | 230 | | | |
| Optional voltage range [V] | 170~280(UPS);120~280(Home appliances) | | | |
| Undervoltage [V] | 170± 7(UPS);120± 7(Home appliances) | | | |
| Undervoltage recovery voltage [V] | 180± 7 (UPS);130± 7(Home appliances) | | | |
| Overvoltage [V] | 280±7 | | | |
| Overvoltage recovery voltage [V] | 270±7 | | | |
| Max. input voltage [V] | 300 | | | |
| Rated input frequency [Hz] | 50/60(Adaptive) | | | |
| Underfrequency [Hz] | 40±1 | | | |
| Underfrequency recovery frequency [Hz] | 42±1 | | | |
| Overfrequency | 65±1 | | | |
| Overfrequency recovery frequency | 63±1 | | | |
| Efficiency (Mains mode) | > 95%(Pure resistive load and fully charged battery) | | | |
| Max. bypass overload current | 40 | | | |
| **Emergency Power Output（EPS）** | | | | |
| Rated output power [VA] | 3000 | 5000 | 6000 | |
| Max. output power [VA] | 6000 | 10000 | 12000 | |
| Max. output current [A] | 13 | 22 | 26 | |
| Rated output voltage [V] | 230±5% | | | |
| Output frequency [Hz] | 50 | | | |
| THDu | < 3% | | | |
| Switching time | 10 ms Typical (UPS) / 20 ms Typical (Home appliances) | | | |
| **Efficiency** | | | | |
| Max. efficiency | 93% | | | |
| **Battery Cell** | | | | |
| Battery Type | LFP | | | |
| Monomer Specifications | 3.2V/100Ah | | | |
| **Batery PACK** | | | | |
| Rated capacity [kWh] | 5.12 | 10.24 | 15.36 | 20.48 |
| Number of modules | 1 | 2 | 3 | 4 |
| Rated voltage [V] | 51.2 | | | |
| Operating voltage range [V] | 44.8~58.2 | | | |
| Max. charging current [A] | 100 | 200 | 300 | 400 |
| Max. discharge current [A] | 100 | 200 | 300 | 400 |
| Max. Depth of Discharge (DOD) | 90% | | | |
| **General Parameters** | | | | |
| Protection level | IP21 | | | |
| Cooling method | Air Cooling | | | |
| Relative humidity | 0~95% ,Non-condensing | | | |
| Operating temperature [℃] | - 10~+50 | | | |
| Altitude [m] | 2000 | | | |
| Noise Index [dB] | ≤60 | | | |
| Display | LCD | | | |
| BMS communication | RS485/CAN | | | |
| APP | WiFi/GPRS | | | |
| weight [kg] | ≈65.6 | ≈113.6 | ≈161.6 | ≈209.6 |
| Dimensions (W*D*H) [mm] | 550*380*473.5 | 550*380*697 | 550*380*920.5 | 550*380*1144 |

# OFF-GRID STACKING ALL-IN-ONE

## LEB-3K-5120-L1-O1 LEB-5K-5120-L2-O1 LEB-6K-5120-L3/L4-O1

Intelligent BMS provides comprehensive protection

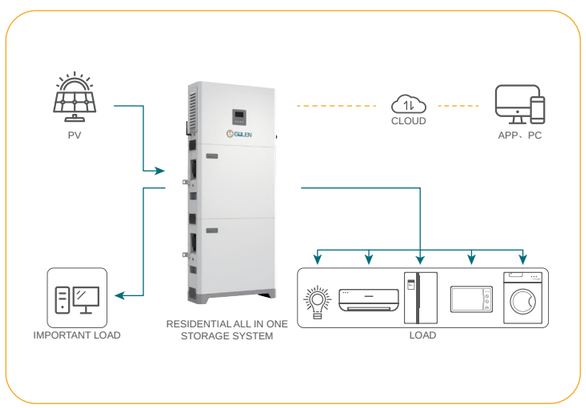
Supports high discharge power, Natural cooling

Max. 32 batteries Parallel

Adopting environmentally friendly materials, non-toxic and non-polluting

Intelligent APP remote monitoring

Villa Hotel Residential electricity Hospital Museum Church






GOLEN

| Model | LEB-3K-5120-L1-O1 | LEB-5K-5120-L2-O1 | LEB-6K-5120-L3-O1 | LEB-6K-5120-L4-O1 |
|---|---|---|---|---|
| **PV Input** | | | | |
| Max.recommended module power [Wp] | 3000 | 5000 | 6000 | |
| Max. input voltage [V] | 500 | | | |
| Starting voltage [V] | 100 | | | |
| MPPT voltage range [V] | 80~450 | | | |
| Full load MPPT voltage [V] | 280~400 | | | |
| Number of MPPT paths/number of strings per path | 1/1 | | | |
| Max. input current [A] | 22 | | | |
| **AC Input (Mains Power)** | | | | |
| Rated input voltage [V] | 230 | | | |
| Optional voltage range [V] | 170~280(UPS);120~280(Home appliances) | | | |
| Undervoltage [V] | 170±7(UPS);120±7(Home appliances) | | | |
| Undervoltage recovery voltage [V] | 180±7(UPS);130±7(Home appliances) | | | |
| Overvoltage [V] | 280±7 | | | |
| Overvoltage recovery voltage [V] | 270±7 | | | |
| Max. input voltage [V] | 300 | | | |
| Rated input frequency [Hz] | 50/60(Adaptive) | | | |
| Underfrequency [Hz] | 40±1 | | | |
| Underfrequency recovery frequency [Hz] | 42±1 | | | |
| Overfrequency | 65±1 | | | |
| Overfrequency recovery frequency | 63±1 | | | |
| Efficiency (Mains mode) | > 95%(Pure resistive load and fully charged battery) | | | |
| Max. bypass overload current | 40 | | | |
| **Emergency Power Output（EPS）** | | | | |
| Rated output power [VA] | 3000 | 5000 | 6000 | |
| Max. output power [VA] | 6000 | 10000 | 12000 | |
| Max. output current [A] | 13 | 22 | 26 | |
| Rated output voltage [V] | 230±5% | | | |
| Output frequency [Hz] | 50 | | | |
| AC voltage distortion rate | > 3% | | | |
| Switching time | 10 ms Typical(UPS)/20 ms Typical(Home appliances) | | | |
| **Efficiency** | | | | |
| Max. efficiency | 93% | | | |
| **Battery Cell** | | | | |
| Battery Type | LFP | | | |
| Monomer Specifications | 3.2V/100Ah | | | |
| **Batery PACK** | | | | |
| Rated capacity [kWh] | 5.12 | 10.24 | 15.36 | 20.48 |
| Number of modules | 1 | 2 | 3 | 4 |
| Rated voltage [V] | 51.2 | | | |
| Operating voltage range [V] | 44.8~58.2 | | | |
| Max. charging current [A] | 100 | 200 | 300 | 400 |
| Max. discharge current [A] | 100 | 200 | 300 | 400 |
| Max. Depth of Discharge (DOD) | 90% | | | |
| **General Parameters** | | | | |
| Protection level | IP54 | | | |
| Cooling method | Air cooling | | | |
| Relative humidity | 0~ 95%, Non-condensing | | | |
| Operating temperature [℃] | - 10~+50 | | | |
| Altitude [m] | 2000 | | | |
| Noise Index [dB] | ≤60 | | | |
| Display | LCD | | | |
| BMS Communication | RS485/CAN | | | |
| APP | WiFi/GPRS | | | |
| Weight [kg] | ≈69.8 | ≈117.8 | ≈165.8 | ≈213.8 |
| Dimensions (W*D*H) [mm] | 560*160*892 | 560*160*1344 | 560*160*1796 | 560*160*2248 |