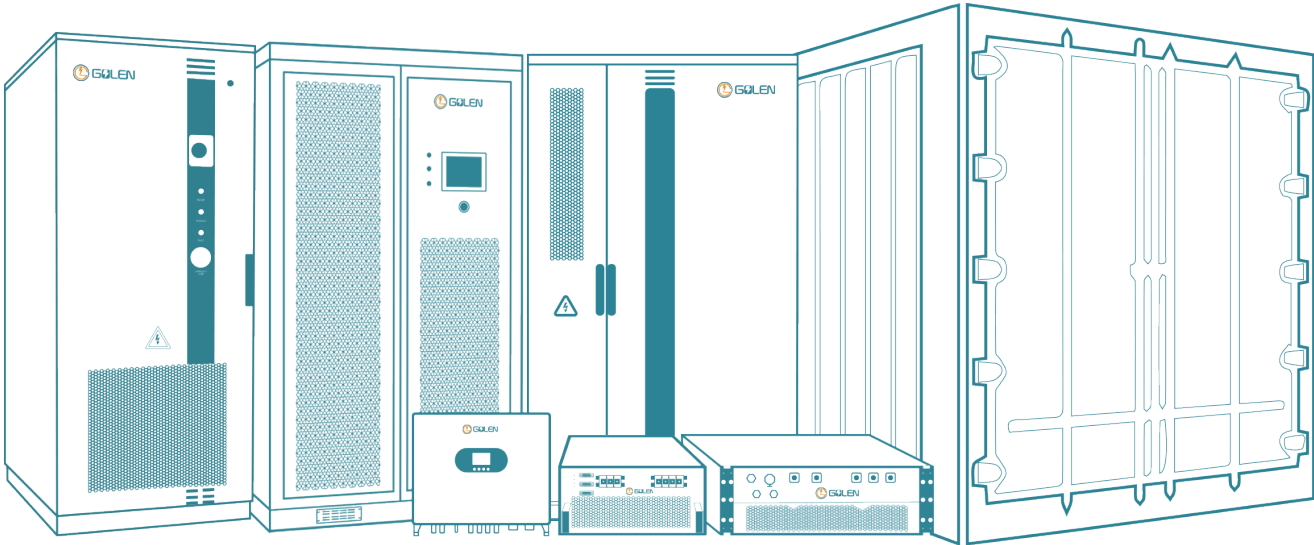




GOLEN POWER

Intelligent ESS, Zero Carbon Future



INTELLIGENT ENERGY STORAGE SERIES PRODUCTS



Golen Power Technology Co., Ltd.

Add: No.24, Xuefu Road, Jiangbei New Area, Nanjing, China
Factory : No.18 Wen'an Road, Chahe Economic Development Zone, China
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2025 V 1.1

GOLEN POWER TECHNOLOGY CO., LTD.

Company Profile	01~02
Development History	03~04
Qualifications and Honors	05~06
Commercial PCS	07~14

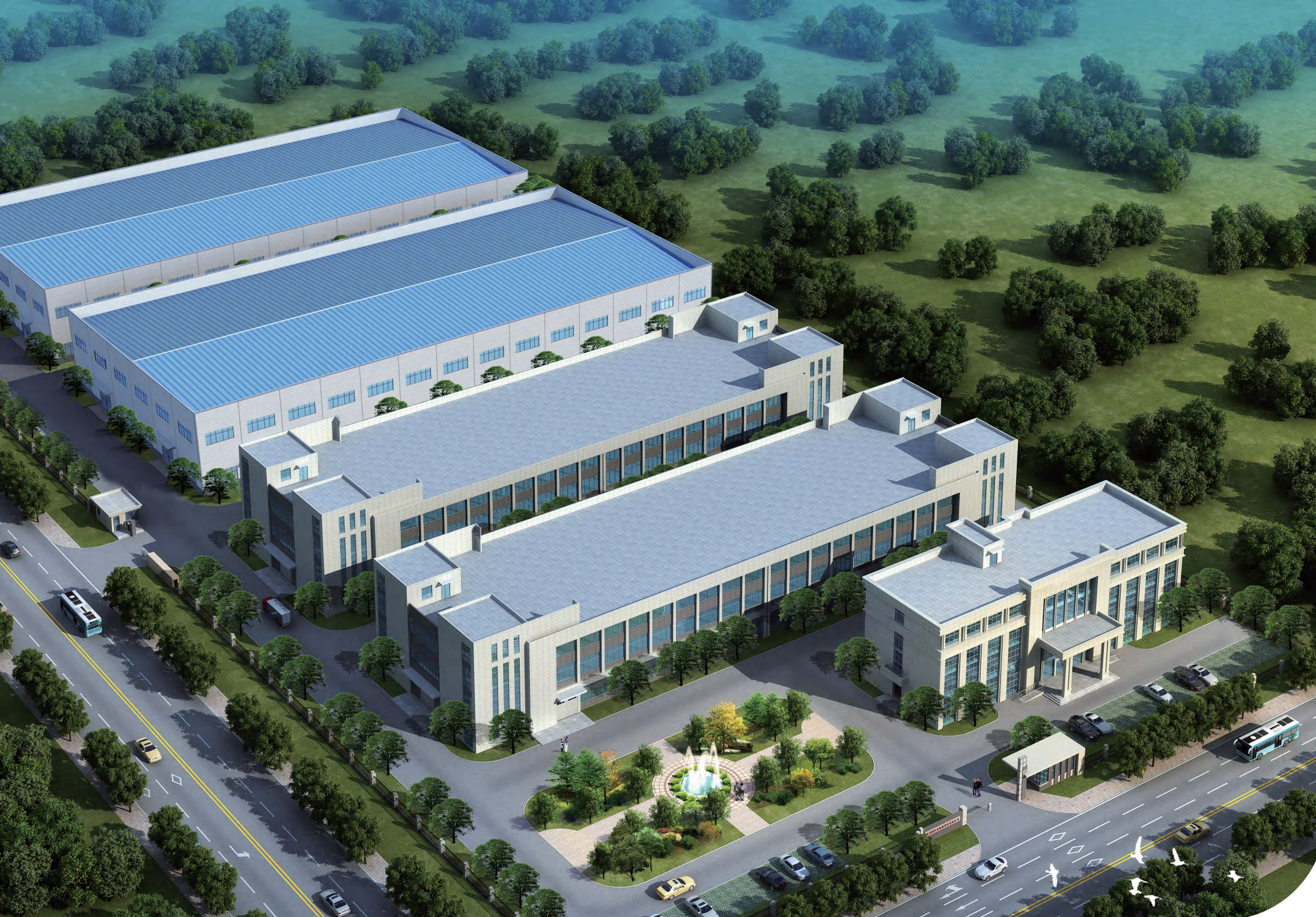
Modular PCS:LEG-100K/125K/135K-TL-P
1500V Modular PCS:LEG-186K/215K-TL-P
Hybrid Inverter:LEI-50K/100K/250K/500K/630K-TT
Commercial PCS:LEG-50K/100K/250K/500K/630K-TT

Energy Storage System	15~28
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Outdoor ESS cabinet (Air Conditioning Cooling):LES-40W20
Outdoor ESS cabinet (Air Conditioning Cooling)::LES-100W50
Outdoor ESS cabinet (Air Conditioning Cooling):LES-200W100/215W100
Outdoor ESS cabinet (Liquid-cooling):LES-215L100/233L100/241L120/261L130
Outdoor ESS cabinet (Liquid-cooling):LES-372L186/LES-418L209
Mobile Energy Storage System:LES-H10-120M1P/250M2P/360M3P
LES-H10-250M2P/250M3P
Container Energy Storage System:LBS-G20-HV/LEG-1250/2500/5000-UD

Residential Hybrid Inverter	29~40
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Single-phase Hybrid Inverter:LEI-3K/5K/6K-SL-A
Three-phase Hybrid Inverter:LEI-4K/5K/6K/8K/10K-TL-A
Three-phase Hybrid Inverter:LEI-10K/12K/15K/20K-TL
Off-grid Hybrid Inverter:LNS-3K60/5K80-SD
Off-grid All-in-one ESS:LEB-3K-5120-L1-O2 LEB-5K-5120-L2-O2
LEB-6K-5120-L3/L4-O2
Off-grid All-in-one ESS:LEB-3K-5120-L1-O1 LEB-5K-5120-L2-O1
LEB-6K-5120-L3/L4-O1



50000⁺
m² BUILDING AREA

2
PRODUCTION BASE

2GW+5GWh
ANNUAL CAPACITY

100⁺
PATENTS

>6%
R&D INVESTMENT

C COMPANY PROFILE

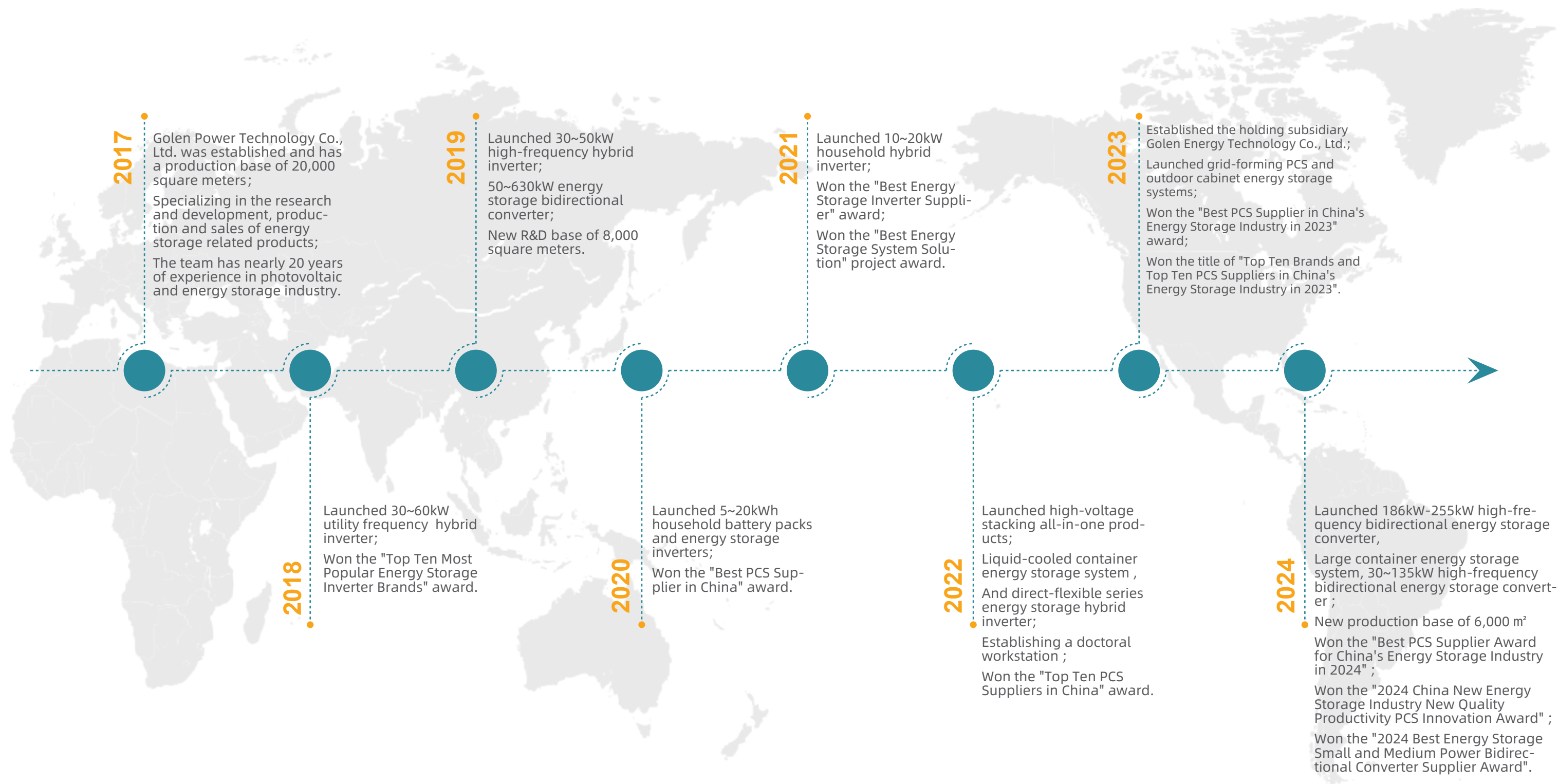
Located in Jiangbei New Area, China (Jiangsu) Pilot Free Trade Zone Nanjing Area. As one of the high-tech enterprises and a specialized and special new enterprise, Golen Power specializes in the R&D, production, and sales of PCS, hybrid inverter, battery pack, BESS, and other products, and investment, 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.



DEVELOPMENT HISTORY



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 Cup Top 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



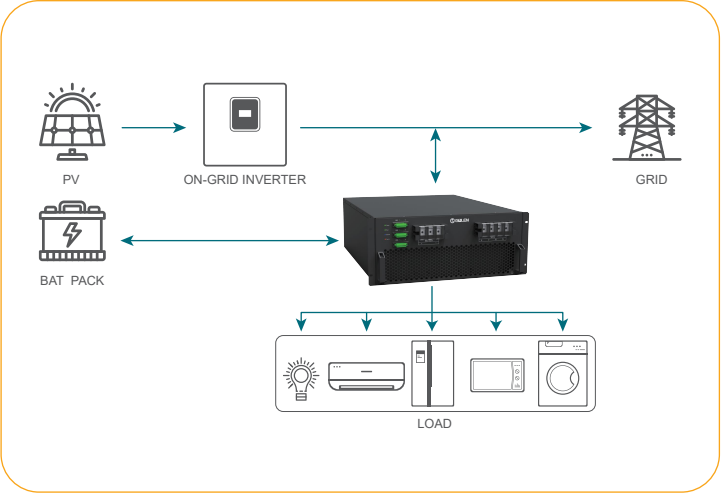
Farm



Hospital



Hotel



Model	LEG-100K-TL-P	LEG-125K-TL-P	LEG-135K-TL-P
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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%
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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 [°C]	-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



Microgrid



Communication base station



Factory



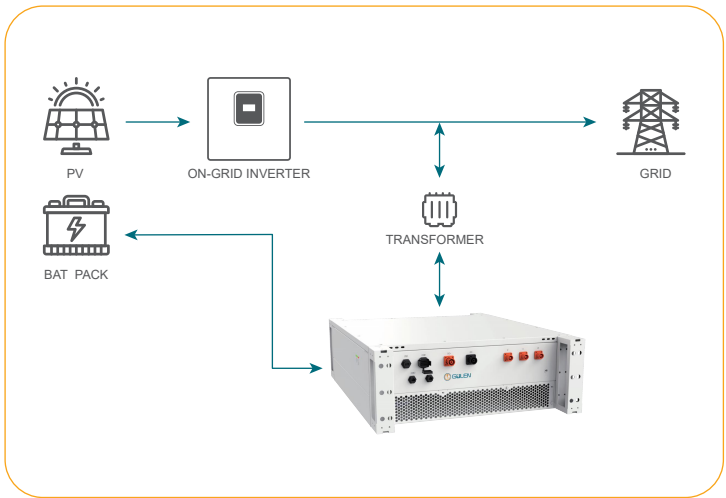
Farm



Hospital



Hotel



Model	LEG-186K-TL-P	LEG-215K-TL-P
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DC Parameters

Max. DC Voltage [V]	1500	
DC voltage Range [V]	1070~1500	

ACParameters (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%
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General Parameters

Isolation Transformer	None
Protection Level	IP66
Operating Temperature [°C]	-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



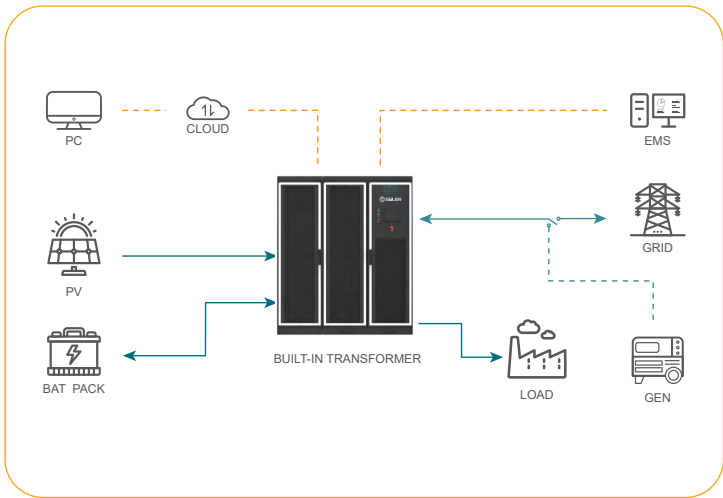
Farm



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
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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 [°C]	-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



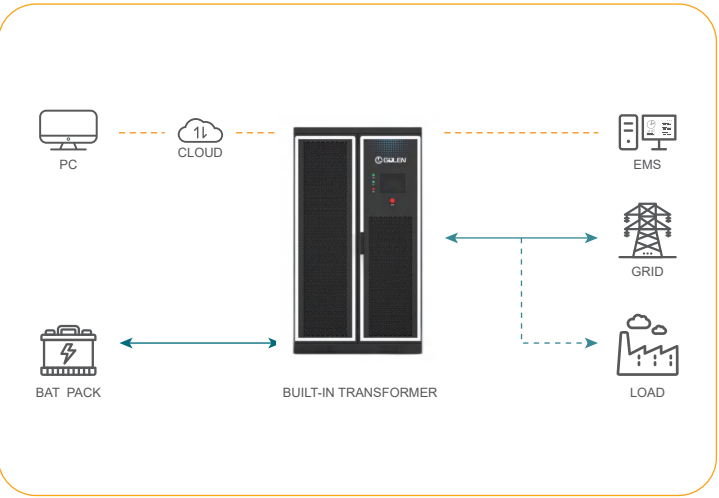
Farm



Mine



Hospital



【 Built-in Transformer 】

Model	LEG-50K-TT	LEG-100K-TT	LEG-250K-TT	LEG-500K-TT	LEG-630K-TT
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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%
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General Data

Isolation Transformer	Yes				
Ingress Protection	IP20				
Temp. Range [°C]	-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
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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 [°C]	-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



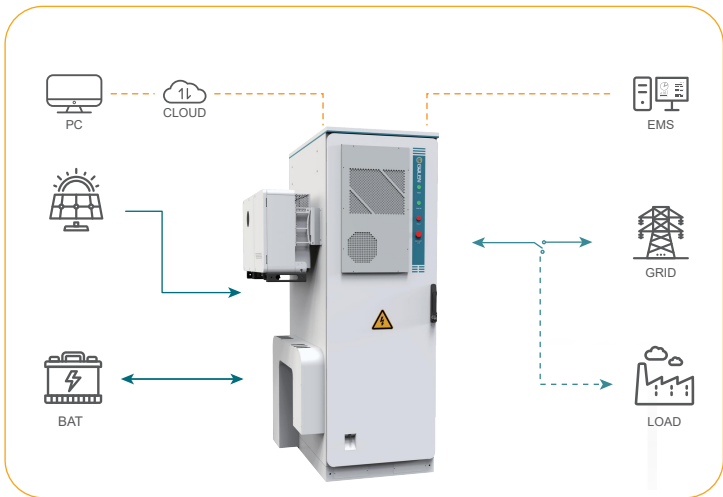
Grid-Side



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 [°C]	-20~55
Storage Temperature Range [°C]	-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	Ethernet/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 dehumidification
Eliminates the risk of condensation



Flexible expansion
Easy installation and maintenance



Air Cooling Design
Maintenance-free air conditioning



【Fan Cooling System】

Model	LES-200W100	LES-215W100
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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 [°C]	-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 dehumidification
Eliminates the risk of condensation



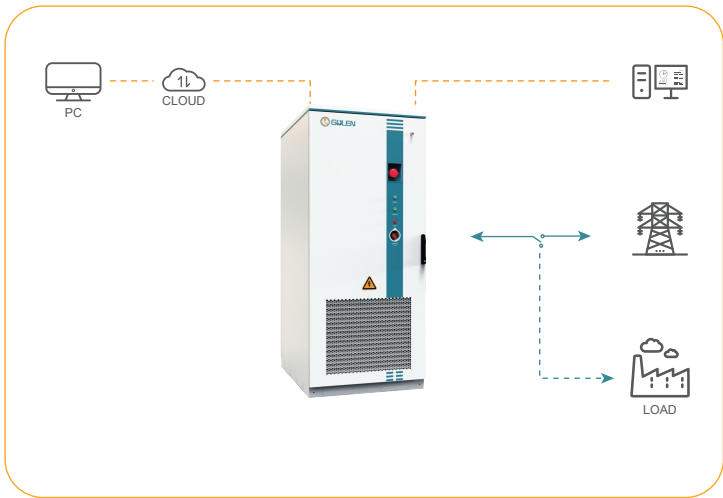
PACK-level liquid-cooled runner design for high cooling efficiency



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
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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 [°C]	-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 dehumidification 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
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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 [°C]	-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



Model	LES-H10-120M1P	LES-H10-240M2P	LES-H10-360M3P	LES-H10-250M2P	LES-H10-250M3P
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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[°C]	-20~+50				
ElectricalCabinCoolingMethod	Air cooling				
ElectricalCabinCoolingMethod	Liquid cooling				
Fire Fighting System	1230 Fire fighting system				
Relative Humidity [°C]	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 [°C]	-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 Grid
Seamless Switching



Simply Design
Easy To Install



Wide Voltage
DC Design



Multiple Operation
Modes



Remote Monitoring
By Computer & Cell phone



Villa



Hotel



Residential
electricity



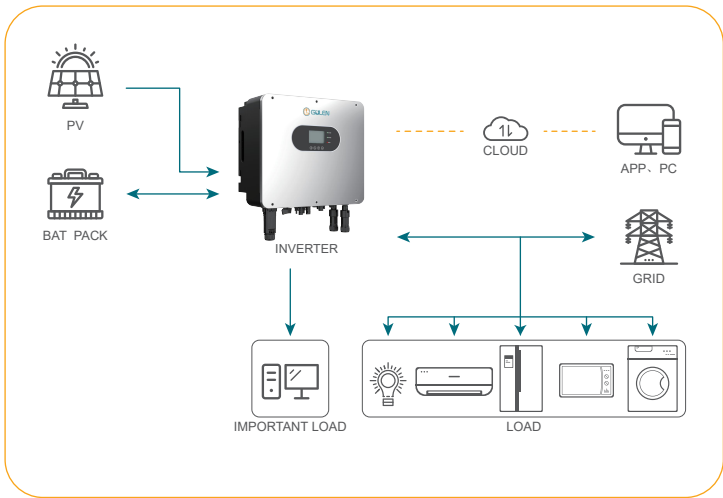
Hospital



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 [°C]	-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 Grid
Seamless Switching



Simply Design
Easy To Install



Wide Voltage
DC Design



Multiple Operation
Modes



Remote Monitoring
By Computer & Cell phone



Independent output of
each phase
(100% unbalance)



Villa



Hotel



Office building



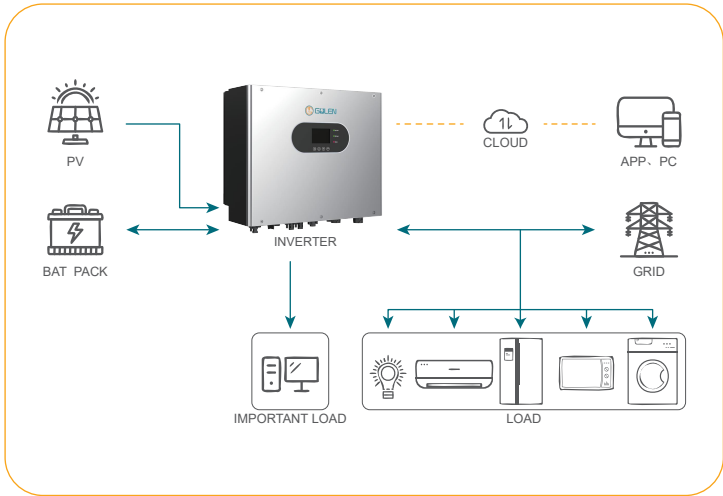
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【Three Phase】 【2MPPT】



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%
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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 [°C]	-25~+60
Altitude [m]	4000(>2000 Derating)
Noise [dB]	<40
Standby Self Consumption [W]	<10
Display	LCD
Communication	RS485/CAN(Standard); Wi-Fi(Optional)
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 Grid
Seamless Switching



Simply Design
Easy To Install



Wide Voltage
DC Design



Multiple Operation
Modes



Remote Monitoring
By Computer & Cell phone



Independent output of
each phase
(100% unbalance)



Villa



Hotel



Office building



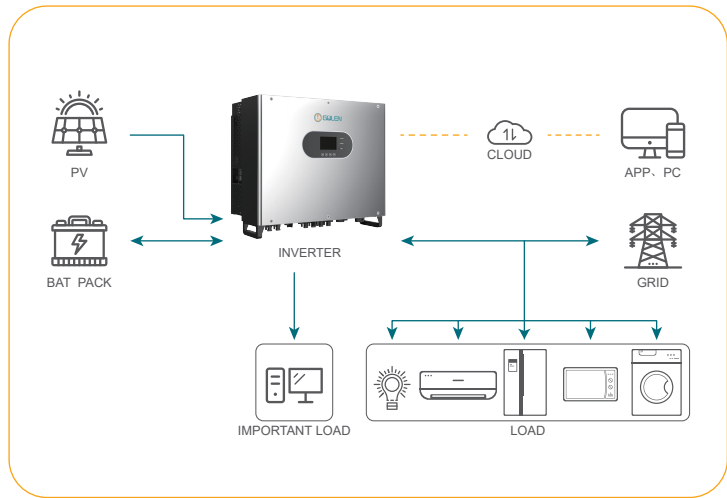
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Church



【Three Phase】 【2MPPT】

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 [°C]	-30~+60			
Altitude [m]	4000(>2000 Derating)			
Noise [dB]	<45			
Standby Self Consumption [W]	<15			
Display	LCD			
Communication	RS485(Standard) ; Wi-Fi(Optional)			
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



Villa



Hotel



Residential
electricity



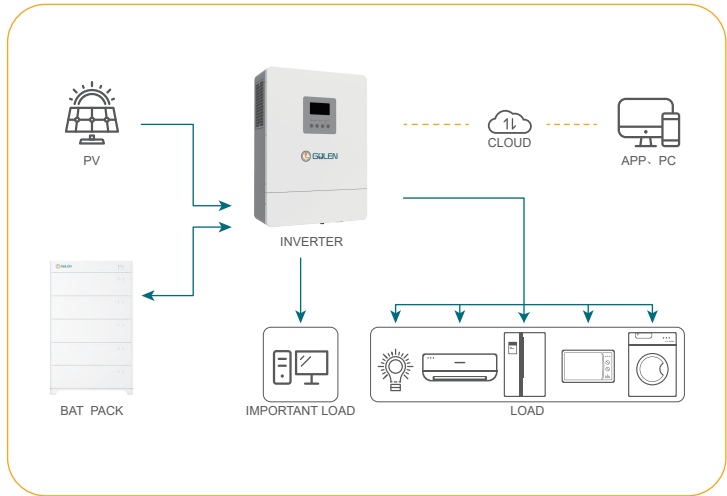
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Church



Model	LNS-3K60-SD	LNS-5K80-SD
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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 [°C]	-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



Villa



Hotel



Residential
electricity



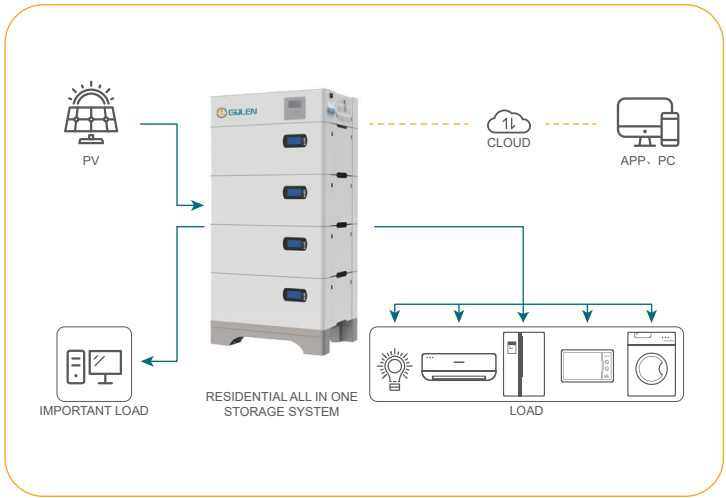
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Model	LEB-3K-5120-L1-O2	LEB-5K-5120-L2-O2	LEB-6K-5120-L3-O2	LEB-6K-5120-L4-O2
PV Input				
Max.recommended module power [Wp]	3000	5000	6000	
Max. input voltage [V]	500			
Starting voltage [V]	100			
MPPT voltage range [V]	80~450			
Full load MPPT voltage [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 [°C]	- 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



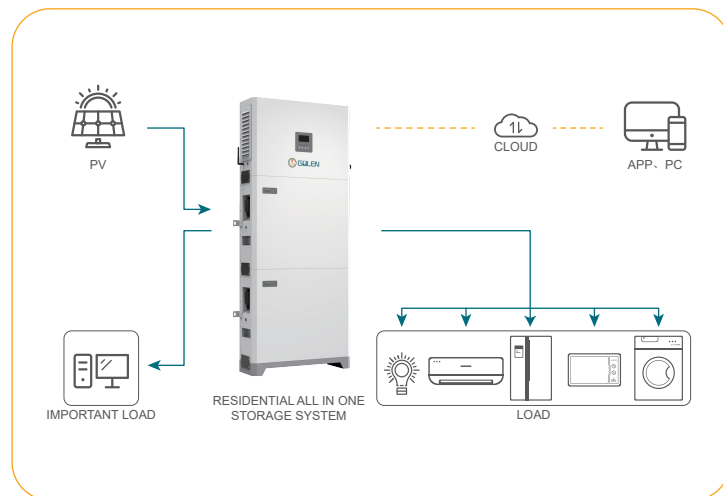
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Church



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 [°C]	- 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