## TENGRUi

Smart Energy Storage, Powering a Brighter Future.

WUXI FENGRUI NEW ENERGY POWER BATTERY CO., LTD

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### TENGRUI

# BUSINESS BROCHURE

WUXI FENGRUI NEW ENERGY POWER BATTERY CO., LTD.



### **COMPANY PROFILE**

Wuxi Fengrui New Energy Power Battery Co., Ltd. (est. 2022, HQ in Wuxi) specializes in R&D and manufacturing of energy storage solutions, including Residential ESS, C&I ESS, Lithium Battery Pack, Portable Power Stations, Mobile Energy Storage Welder, Jump Starter, etc.. Our products feature high energy density, IP65 protection, 6000+ cycles, and comply with CE/UN38.3, empowering global sustainable energy transition.

We have flexible customization capabilities and can provide tailored energy solutions according to customer needs. Our brand "FENGRUI" is committed to providing efficient, safe, and eco-friendly energy solutions, helping customers achieve energy independence worldwide.



### Partnerships That Evolve with You

We offer three flexible collaboration models:

- 1. OEM/ODM Services: Develop products under your brand with full technical support.
- 2. Volume Manufacturing: Economical bulk production with guaranteed consistency.
- 3. Co-Engineering Partnerships: Jointly design next-generation solutions for emerging markets.

### QUALIFICATION CERTIFICATION



















### **ENERGY STORAGE SOLUTIONS**

# Liquid Cooled C&I ESS (FRY-52S) 11-04 Low-voltage Stackable All-in-One ESS (FGL48100) 15-06 Low-voltage Wall-mounted All-in-One ESS (WSL48100) 17-08 Low-voltage Floor-mounted All-in-One ESS (GSK-5kWh-DS) Low-voltage Floor-mounted All-in-One ESS (GSK-100WK-D) 11-12 Integrated Floor-mounted Low-voltage ESS (GSK-150WK-L) 13-14 Complete Set of High-voltage Residential ESS (CQH-01)

### MULTI-FUNCTIONAL LFP BATTERY PACK

Low-voltage Wall-mounted Energy Storage Bat	tery (GSK-5kWI	n-G) <b>17-18</b>
Low–voltage Floor–mounted Energy Storage Batt	ery (FRN-01)	19-20
High–voltage Stackable Energy Storage Battery	(GSK-102V/100A	Ah) <b>21-22</b>
Mobile Energy Storage Welder (FRH–01)		23-24
Portable Suitcase–style Power Supply (FRL–01	)	25-26
High–Cranking LFP Backup Battery for Trucks (	FRQ-01)	27-28
Golf Cart Lithium Battery (GF38.4/51.2V)		29-30



### Liquid Cooled C&I ESS (FRY-52S)

- Liquid Cooling & Wide Temp Range, reliable energy storage for extreme climates.
- Modular 262kWh Scalable Capacity, grow your power supply as business demands.
- IP55 + Aerosol Fire Suppression, safe operation in crowded urban areas.
- Smart OTA Remote Management, update and monitor your system anytime, anywhere.

### **Battery Specs**

Model	FRY-52S/314Ah
Cell Capacity	314Ah
Cell Type	LFP
Battery Pack	52\$
Nominal Capacity	52.2kWh
Nominal Voltage	166.4V
Cooling Method	Liquid (Water & Ethylene Glycol)
Fire Suppression	Aerosol
Weight	350Kg



FRY-52S

Liquid Cooled C&I ESS 262kWh

### Liquid Cooled C&I ESS (FRY-52S)

- <3% THD & Grid Stability (±15%), clean power for sensitive medical/industrial equipment.
- Space-Saving Design (1.58m Depth), fast installation, faster ROI in tight spaces.
- VPP-Ready Energy Storage, turn stored power into grid revenue streams.
- 314Ah LFP Battery, slash long-term costs for factories and campuses.

Max. Powe	
Rated Power	100KW
Frequency	110KW
Rated Voltage	380VAC
	50/60Hz
Grid Freduency Rang	45–55 Hz/55–65 Hz
Voltage Tolerance	± 15%
	<3%

### System Specs

Systempleacity	262kWh
Dimensions (L*D*H)	L1080 × D1586 × H2350mm
	2.8T
Protection Class	IP55
Operation Temperature	–20°C~50°C
Max. Altitude	3000m
Fire Suppression	Aerosol / Water Fire Fighting
Communication	RS485/CAN/4G

### TE WGRUi



### Low-voltage Stackable All-in-One ESS (FGL48100)

- Compact Modular Design, Space-Saving Installation;
- Modular Scalability, Adapt to Growing Energy Demands;
- 5000W High Output, Power Heavy-Duty Appliances;
- 6000+ Cycle Lifespan, Long-Term Cost Efficiency;
- Dual-Mode Compatibility, Grid or Off-Grid Flexibility.

Specifications		Paramete	7 Tender
Stackable	Townson	Translated  a to the state of t	
Component	Inver	ter + Battery Pack +	Base
Configuration		51.2V/102AH	
IP Rating		IP21	3
Modules Supported	1	2	15.66kWh
Capacity Options	5.22kWh	10.44kWh	634×1521×170
Dimensions $(L \times W \times H)$	$634 \times 771 \times 170$	634×1146×170	174.2Kg
Weights	71.4Kg	112.8Kg	J
Communication		CAN/RS485	
MPPT Range		150-500V	
AC Output		220/230/240VAC	
Output Power	5000W		
Maximum Charge/ Discharge Flow	100A		
Input Power	120-300V (PV) / 220-240V (On-Grid)		
Max PV Input	5000W		
Cycle Life	6000cycles		
Application	Grid-connected/ Off-grid		
Connection Type	Single-phase		

PRODUCT INTRODUCTION 06

15.66kWh

### 7 E N G R U i



### WSL48100

Low-voltage Wall-mounted All-in-One ESS

5.22kWh









15.66kWh

10.44kWh

### Low-voltage Wall-mounted All-in-One ESS (WSL48100)

- Wall-Mounted Compact Design, Space-Efficient Installation;
- Modular Scalability, Adapt to Growing Energy Demands;
- \* 5000W High Power Output, Sustain Heavy Loads Seamlessly;
- Grid/Commercial Dual Mode, Flexible Energy Solutions;
- IP21 & BMS Integration, Safe Operation Guaranteed.

Specifications	Paramete
Stackable	Translated E

Component	lr	nverter + Battery Pac	ck
Configuration		51.2V/102AH	
IP Rating		IP21	
Modules Supported	1	2	3
Capacity Options	5.22kWh	10.44kWh	15.66kWh
Dimensions $(L \times W \times H)$	600 × 655 × 163	634 × 1005 × 163	600 × 1355 × 163
Weights	60.8Kg	108Kg	155.2Kg
Communication	CAN/RS485		
MPPT Range	150-500V		
AC Output	220/230/240VAC		
Output Power	5000W		
Maximum Charge/ Discharge Flow	100A		
Input Power	120-300V (PV) / 220-240V (On-Grid)		
Max PV Input	5000W		
Cycle Life	6000cycles		
Application	Grid-connected/ Off-grid		
Connection Type		Single-phase	



- · LFP Long-Life Cells, Cut Replacement Costs for Decades;
- Expandable 5–41kWh Capacity, Grow with Energy Needs;
- -15° C to 60° C Operation, Defy Extreme Weather;
- 100A Rapid Charging, Minimize Grid Dependency;
- Slim Stackable Design, Maximize Limited Spaces.

Model	GSK - 5kWh - DS
Cell Type	LFP/100Ah
Battery Pack	1P16S
Rated Voltage	51.2V
Rated Energy	5.12kWh
Operating Voltage Range	40V-58.4V
Standard Charge Current	30A
Max Charge/Discharge Current	100A/120A
Module Connection	1–8 in Parallel
Charge/Discharge Temperature	-5°C~55°C/−15°C~60°C
MPPT Voltage Range	120-450Vdc
Cycle Life	6000+
Communication	RS485
Dimensions (Single Battery Pack)	L535 × W395 × H175(mm)
Weight (Single Battery Pack)	Approx.42Kg

### Application scenarios













### GSK-5kWh-DS

Low-voltage Floor-mounted All-in-One ESS

5-41kWh





• 110A Rapid Charging, Cut Solar Recharge Time by 50%;

Application scenarios

• -20° C to 60° C Resilience, Thrive in Harsh Environments;







- Solar-Ready Design, Maximize Green Energy Savings;
- RS485 Communication, Centralized Energy Control.

Model	GSK-100WK-D
Cell Type	LFP/184Ah
Battery Pack	1P16S
Rated Voltage	51.2V
Rated Energy	9.42kWh
Charging Method	Constant Voltage/Constant Current
Charging Voltage	58V ± 0.75V
Recommended Charge Current	55Ah ( 0.3C )
Max Charge/Discharge Current	110A
Max Continuous Load Power	5120W
Module Connection	1–15 in Parallel
Charge/Discharge Temperature	0°C~50°C/−20°C~60°C
Recommended Solar Panel Power	≥2000W
Internal Impedance	≤40mΩ
Communication	RS485
Dimensions (Single Battery Pack)	L680 × W420 × H190(mm)
Weight (Single Battery Pack)	Approx.72Kg



All-in-One ESS

9.42kWh



- LFP280Ah Core, Decade-Long Energy Security;
- -15° C to 60° C Resilience, Extreme Climate Ready;
- 200A High-Speed Charging, Fuel Heavy Loads Instantly;
- 5120W Max Output, Power Homes & Shops 24/7;

• Smart BMS Protection, Prevent Overuse Risks.

Solar-Integrated Design, Space-Saving Green Energy;

Application scenarios







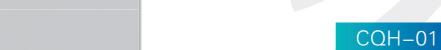




Model	GSK-150WK-L
Nominal Capacity	LFP/280Ah
Usable Capacity	≥280Ah
Rated Voltage	51.2V
Rated Energy	15kWh
Charging Method	Constant Voltage/Constant Current
Charging Voltage	58V ± 0.75V
Battery Management System (BMS)	100A
Recommended Charge Current	55Ah ( 0.3C )
Max Continuous Charge/Discharge Current	200A
Max Discharge Current (5s)	120A
Max Continuous Load Power Supported	5120W
Charge/Discharge Temperature	-5°C~55°C/-15°C~60°C
Internal Impedance	≤20mΩ
Dimensions	L880 × W415 × H250mm)
Weight	115Kg
Recommended Solar Panel Power	≥2000W

### TE & GRUi





Complete Set of High-voltage Residential ESS 8.64kWh-17.28kWh

### Complete Set of High-voltage Residential ESS (CQH-01)

- Solar/wind compatibility, reduces grid reliance and bills.
- IP54 Protection and flame retardant, ensures worry-free usage.
- Wide capacity range supports 24/7 household demands.
- Real-time monitoring prevents overuse, optimizing durability.
- 3~6 layers stacking, adapts to growing household energy needs.









### **Battery Specs**

Cell	LFP/50Ah
Capacity of the Battery Pack	2.88kWh
Series-Parallel Configuration	1P18S
Nominal Voltage	57.6V
Protection Class	IP54
Weight	31.5Kg
Fire Suppression	Aerosol
Dimensions of the Battery Pack	652 × 203 × 177mm

### System Specs

8.64-17.28kWh
3–6
10-15kW
50A
172.8-345.6V
CAN/RS485

### TENGRUI



- High-Capacity LFP Cells, Reliable Home Energy Storage;
- · Wall-Mounted Efficiency, Free Up Valuable Floor Space;
- Natural Air Cooling, Silent and Maintenance-Free Operation;
- 5120W Max Output, Power Multiple Appliances Simultaneously;
- Eco-Friendly Design, Reduce Your Carbon Footprint;
- · Quick Installation Service, Ready in Hours, Not Days;
- · Compatible with Solar/Wind, Maximize Renewable Savings.

Model	GSK-5kWh-G		
Cell Type	LFP/102Ah		
Battery Pack	1P16S		
Rated Voltage	51.2V		
Rated Energy	5.12kWh		
Operating Voltage Range	40V-58.4V		
Standard Charge/Discharge Current	50A/75A		
Max Continuous Charge/Discharge Current	100A		
Max Continuous Load Power	5120W		
Module Connection	1–16 in Parallel		
Charge/Discharge Temperature	-5°C~55°C/-15°C~60°C		
Cycle Life	6000+		
Communication	RS485		
IP Rating	IP20		
Dimensions	L570 × W360 × D146(mm)		
Weight	42Kg		
Cooling Method	Natural Air Cooling		





- LFP Battery Technology, Enhanced Safety Assurance.
- 20-Module Parallel Scalability, Expand as Needs Grow.
- 15kW High-Power Output, Support Heavy Loads Seamlessly.
- -10° C to 55° C Tolerance, Thrive in Harsh Conditions.

Model	FRN-01
Nominal Capacity	15kWh
Nominal Voltage	51.2V
Operating Voltage Range	43.2~57.6V
Rated Capacity	280Ah
Max Charge/Discharge Current	200A/200A
Max Output Power	15kW
Module Connection	1–20 in Parallel
Charge/Discharge Temperature	0~55°C/−10~55°C
Recommended Depth of Discharge (DoD)	0.9
Cycle Life	>6000Cycles
Communication	CAN/RS485
Dimensions (L $\times$ W $\times$ H)	395 × 243 × 830mm





- High-Voltage Stackable Design, Boost Energy Efficiency by 60%;
- · Arctic winters or desert summers, performance remains stable;
- 10.24kWh High-Density Storage, Compact Yet Powerful;
- CAN/RS485 Smart Control, Real-Time Energy Optimization;
- 50A Max Current, Sustain Critical Operations Seamlessly.

N	Model GSK-102V/100Ah		
	Туре	LFP	
Cell	Rated Voltage/Capacity	3.2V/100Ah	
	Internal Resistance	≤ 0.3mΩ	
Rated Voltage		102.4V	
Rated Energy		10.24kWh	
	Configuration	1P32S	
Ba	ttery Pack Voltage Range	80V-116.8V	
Standard Charge Current		30A	
Sta	andard Discharge Current	30A	
1	Max Operating Current	50A	
Charge/Discharge Temperature		0°C~60°C/-20°C~60°C	
Communication		CAN/RS485	
Dime	Dimensions (Single Battery Pack) L680 × W528 × H190(mm)		
Weight (Single Battery Pack) Approx.80Kg		Approx.80Kg	

### GSK-102V/100Ah

High-voltage Stackable Energy Storage Battery 10.24kWh





- High-Capacity LFP Battery, Extended Operational Uptime;
- 6000W High-Power Output, Tackle Heavy-Duty Welding;
- IP43 & Forced Air Cooling, Built for Tough Environments;
- 30A~50A Quick-Plug Design, Streamline Workflow;
- Wide MPPT Voltage Range, Optimize Solar Integration;
- Full Electrical Management, Prevent Overload Risks.

### DC Parameters

Cell Type	LFP/104Ah
Battery Capacity	5.3kWh
Series-Parallel Configuration	1P16S
DC Voltage	51.2V
MPPT Voltage Range	90V-500V
MPPT Max Input Current	27A

### **AC Parameters**

Rated Power	6000W
Rated Output Voltage	230V
Rated Output Frequency	50/60Hz
Grid/Off-grid Switching Time	10ms
Max Output Current	10A

### Welder Parameters

Max Welding Current	120A
Electrode Diameter	1.5-3.2mm
Plug Type	30A-50A High-Current Quick Plug

### System Parameters

IP Rating	IP43
Dimensions	L600 × W450 × H490mm
Cooling Method	Air Cooling



### FRL-01

Portable Suitcase-style Power Supply

2.66kWh

### Portable Suitcase-style Power Supply (FRL-01)

- Compact Trolley Design, Effortless Portability;
- 2000W AC Output, Power Critical Devices Anywhere;
- Multi-Interface Support, Charge All Your Gear;
- 2500+ Cycle Lifespan, Invest with Confidence;
- IP-Rated Robust Shell, Built for Harsh Environments;
- Smart LCD Monitoring, Real-Time Power Insights.

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Cell Type	LFP/52Ah
Battery Capacity	2.66kWh
Rated Voltage	51.2V
Charging And Discharging Range	44.8V-57.6V
Charging And Discharging current	30A/50A
Charge Discharge Temperature	-10°C~40°C/-10°C~45°C
Charge	58.4V 8A Charge
	Type-C:PD20W
Output	USB:QC18W
	Car Charger:12V-10A(120W Max)
AC Output	110V,220V,50-60Hz,2000W(Sine Wave)
AC Continuous Output	2000VV
Power Display	LCD Display
Cycle Life	2500+
Dimensions	560 × 350 × 235mm
Weight	27.2kg (Black) / 29.4kg (Army Green)



# B+ AGG B- TENGRUI B+ AGG B- TENGRUI TENGRUI Lithium iron Phosphate Burner Lithium iron Phosphate Burner

### FRQ-01

High-Cranking LFP Backup Battery for Trucks

7.2kWh

### High-Cranking LFP Backup Battery for Trucks (FRQ-01)

- 7.2kWh LFP Core, Uninterrupted Truck Power;
- -40° C to 60° C Tolerance, Harsh Climate Ready;
- 2500A Surge Current, Revive Dead Batteries Instantly;
- IP65 Rugged Shell, Defy Dust and Water Damage;
- CAN/Bluetooth Monitoring, Real-Time Power Control.

System Power	7.2kWh
Built–in Battery	LFP/280Ah
Rated Voltage	25.6V
IP Rating	IP65
Temperature Range	-40°C~60°C
Max Voltage	30V
Max Continuous Charge Current	150A
Max Continuous Discharge Current	150A
Max Starting Current	2500A
Communication	CAN/Bluetooth
Heating	400W Heating
Dimensions	$500 \times 336 \times 244$ mm
Weight	58.4Kg
Forced Start	Yes
Application	Truck Power Supply



### Golf Cart Lithium Battery (GF38.4/51.2V)

- Multi-Capacity Flexibility (2.3~5.12kWh), Adapt to Varied Needs;
- 200A BMS Protection, Full-System Safety Assured;
- Lightweight & Portable (28kg), Deploy Anywhere Effortlessly;
- Plug-and-Play Setup, Operational in Minutes;
- IP54-Rated Durability, Defy Dust and Rain Challenges.









Model	GF3660T	GF3610T	GF4860T	GF4810T
Specification	2.3kWh	3.84kWh	3.07kWh	5.12kWh
Capacity	60Ah	100Ah	60Ah	100Ah
Max Charge Current	50A	100A	50A	100A
Max Discharge Current	100A	200A	100A	200A
Operating Voltage Raange	30-4	13.8v	40-	58.4v
Standard Voltage	38	.4V	51	.2V
Max Charge Voltage	43.8V		58	.4V
Cycle Lifetime	6000+			
Operating Humidity	65 ± 20% RH			
Operating Temperature	-10°C~50°C			
Operating Altitude	≤2500m			
Cooling Method	Natural Cooling			
Dimensions (mm)	$447 \times 283 \times 175$	$531\times300\times177$	$447 \times 283 \times 175$	$531 \times 300 \times 175$
Weight	26Kg	35Kg	28Kg	42Kg