BIGLUX INNOVATION LTD

Generator Sets | Lighting Towers | Battery Power Bank | Hybrid Power Solutions | Battery Pack & Residential ESS

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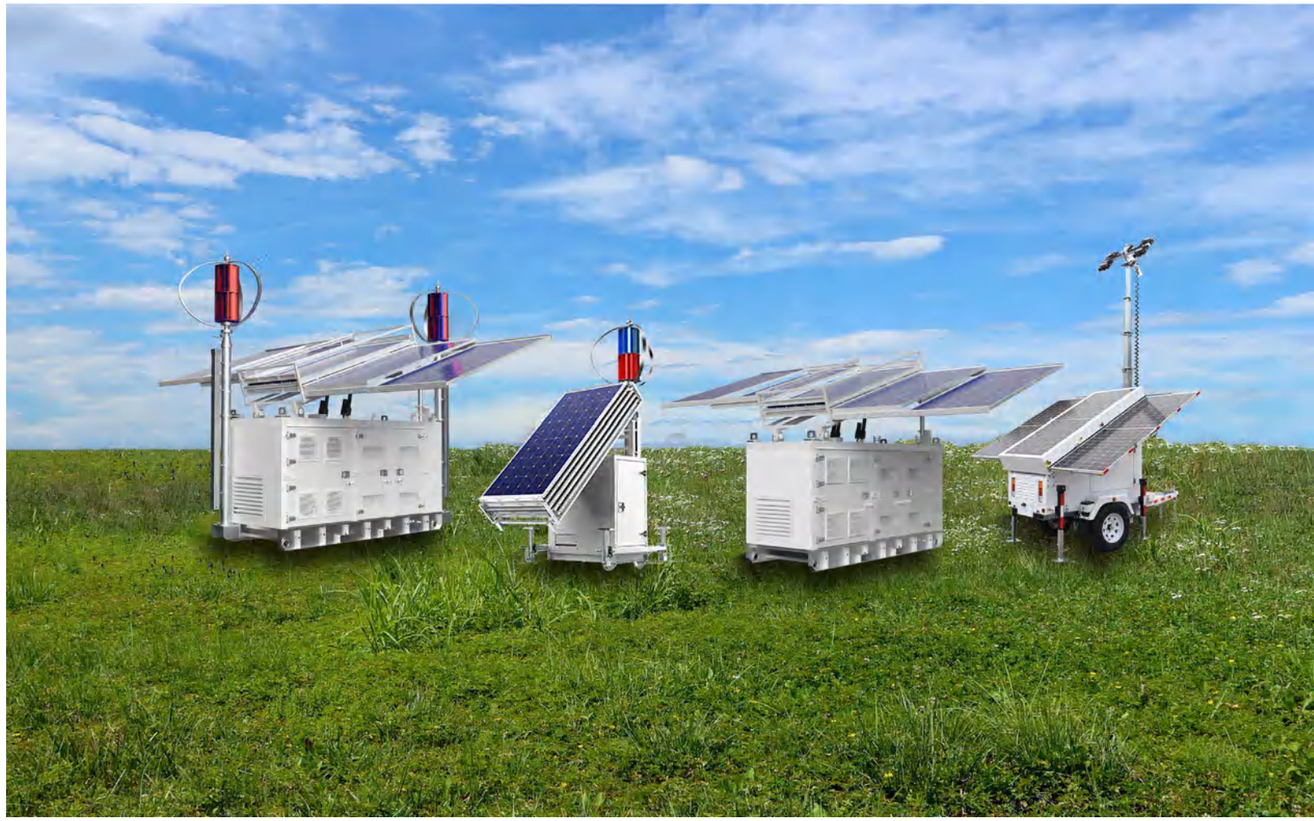
HYBRID ENERGY SOLUTIONS

Commercial | Industrial | Residential



BIGLUX INNOVATION LTD

Global leader in distributed solar hybrid solutions & off-grid systems

120 Countries
Products are exported to 120 countries

52 Types
Three categories of 52 types of products

12000 Sets
Annual production capacity

50 Specialists
50 solution experts focused on different applications

107 Patents
6 invention patents, 91utility model patents, 8 software copyrights and 2 appearance patents.

YOUR POWER OUR PASSION

BIGLUX develops and implements specific & inovative mobile solar power and mobile solar generator solutions for diferent commercial and industry applications.- By adopting the latest renewable energy technology, BIGLUX integrated solar and LFP battery system to develops and implements the most energy saving renewable mobile solar systems to work as solar light tower, solar CCTV tower and moble power solution for outdoor parking lot, outdoor sports, events, construction site, work site, data base_, miitary base and emergency applications etc.

WHAT WE HAVE
A strong expertise in SOLAR and LFP battery technologies
An insatiable thirst for smart intelligent controlled SOLAR integrated system.
A broad experience in SOLAR and HYBRID POWER applications
A background of over 10 years' experience in SOLAR and HYBRID POWER
A great heart of contribution to the most energy saving and environment friendly world.

WHAT WE DO
1.FOR THE SOCIETY: We are trying to provide a long-term energy saving solution,save the energy, save the world. And by supplying mobile solar energy featured with lighting, communication, and CCTV security, we can help those who experienced the earthquake or other accident to get in touch with families and friends. We can create more time for construction, mining and oil site work.
2.FOR THE INDUSTRY: We are a quaity oriented and innovation driven company, At BIGLUX, inovation extends far beyond the new technologies, it applies in its mobile solar energy solutions. Innovation encompasses many breakthroughs thought when managing all aspects of its product design and development processes. We devoted to leading to the industry.
3.FOR OUR CUSTOMER: We aim to suply WOW factor solutions for the customer. By utizing abundant available resources namely raw materials, new technology, work force and sub assemibly resources from China, BIGLUX is able to provide highly COMPETITIVE pricing cormpared with products of same class and technology.
4.FOR OUR STAFF: We want to build a TEAM, everyone of team can enjoy their work and lfe, and everyone's effort willturn into great achievement of the company.

BIGLUX boasts of perfect quality control system

CE certificate

TLC certificate

ARCADIS cerfificate

ISO9001
Quality system certified

ISO14001
Quality system certified

ISO45001
Quality system certified

High Quality Products Created Under Strict Quality Control System

Strict standard on product testing and process inspection is formulated to ensure product quality. from the moment when materials arrive in the workshop to the time for delivery, all the essential processes are under inspection and control by professional inspectors. Products with defects are not allowed to move to the next procedure unless the problems are well settled. Through complete quality control system, all-round control is performed over the aspects from design to production, from personnel to equipment, from process and material to the working site, so as to satisfy the requirements of customers.

In order to make sure that product performance and quality meet the demanding requirements of our customers, advanced testing center is established in BIGLUX for new product design and delivery inspection.the inspection contents are in line with ISO8528 standard and performance requirements in special industry and regions.

PRODUCT PORTFOLIO

Hybrid Power Stations

Power Bank & DG

Hybrid Microgrids

Hybrid Lighting Towers

High and low temperature environmental testing system

Noise measurement system

Safe electrical test system

BIGLUX HYBRID®

WSB/SB Series

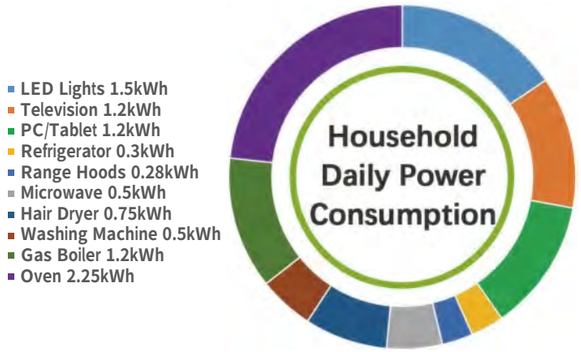
Hybrid Solutions

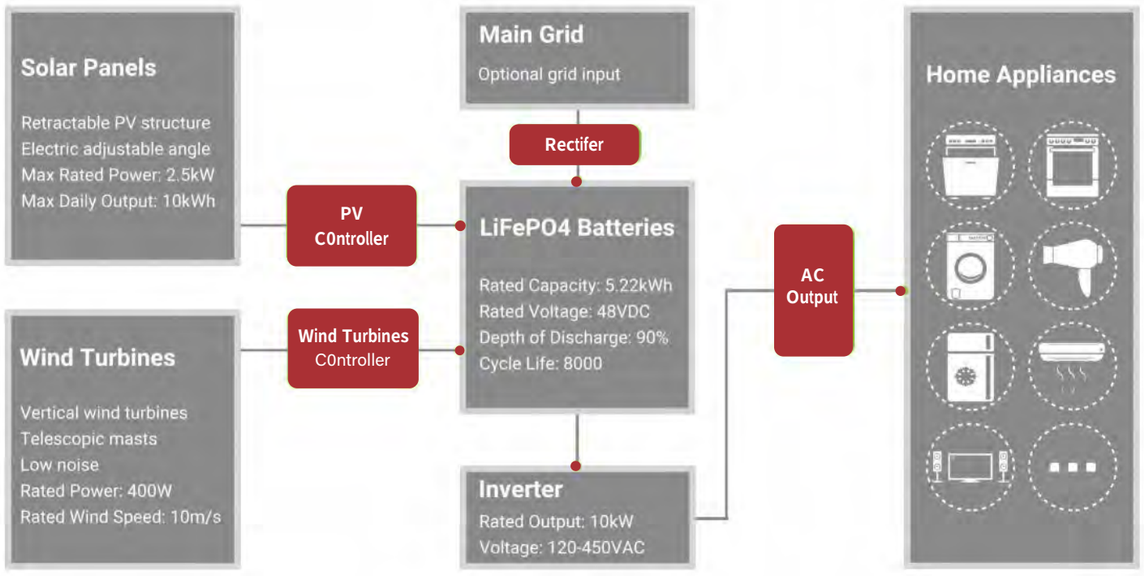
For Residential & Commercial Independent Power

By optimizing the integration of solar power, wind power, and energy storage systems, BIGLUX Hybrid Energy Solutions WSB / SB Series has lower costs than conventional solar & batteries storage systems on the market. BIGLUX wSB / SB Series have the advantages of free installation, inattentive operation & maintenance, and greatly shortening the investment return period.

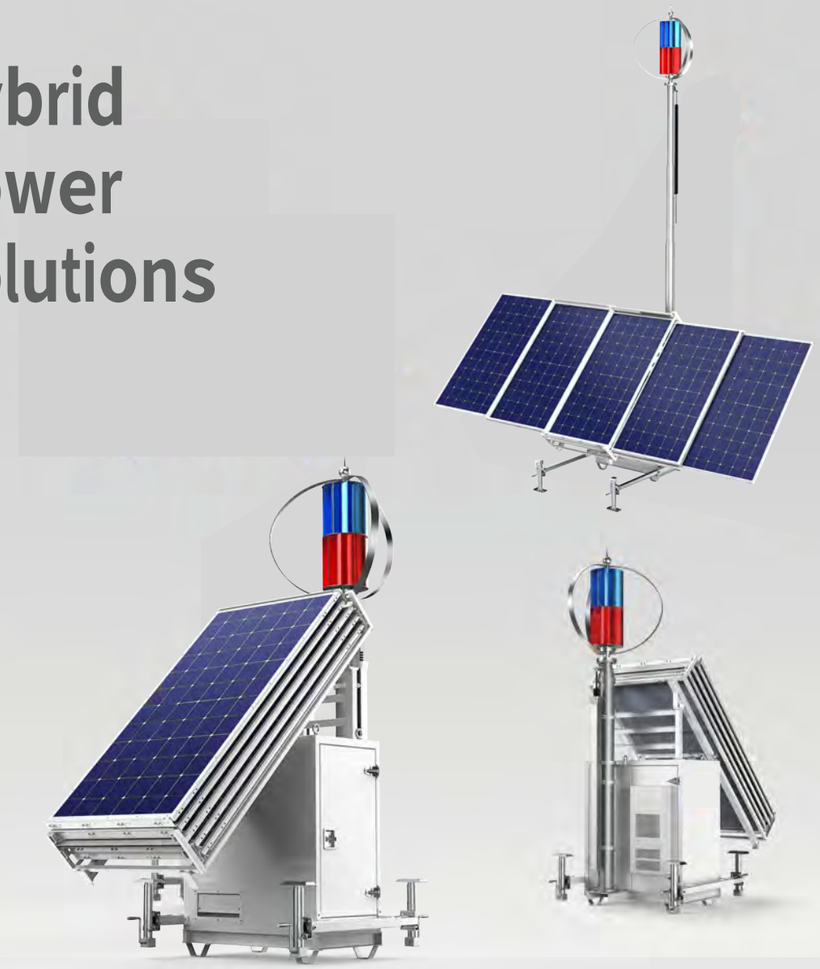
The system ensures power supply at night and in remote areas without main grid, saving at least 3,600 kWh of electricity every year. By expanding the capacity, other than saving on electric bills, excess electricity can also be sold into the grid.

Based on a typical use of household electrical appliances and the shift to more energy - saving appliances, taking account of actual service time of each electrical appliance, the estimated daily household power consumption is9.58kWh and peak power is about 5940W. And system capacity can be expanded according to requirements.





Hybrid Power Solutions



Specification

*Customization available

MODEL				BL-SB-8S	BL-SB-10	BL-WSB-8S	BL-WSB-10
LFP Battery Energy Storage System @50Hz/60Hz	LFP Battery	Capacity kWh	Min	10			
			Max	30			
		HV/LV		LV			
	Hybrid Inverter		Model	BL-MIV-8S	BL-MIV-10	BL-MIV-8S	BL-MIV-8S
			kVA	8	10	8	10
			Phase	1	3	1	3
	Cooling System			Fan	Fan	Fan	Fan
Solar Panel	Panel Power		W	460	460	460	460
	Total Power		W	2300	2300	2300	2300
Wind Turbine	Unit Rated Power		W	Not Included		400	400
	Total Power					400	400
Dimensions	Loading		L*W*H(mm)	1380*1150*2550	1380*1150*2550	1750*1150*2550	1750*1150*2550
	Loading Qty		20GP	8	8	6	6
			40HC	16	16	12	12
	Expand		L*W*H(mm)	2400*5400*2530	2400*5400*2530	3900*5400*7000	3900*5400*7000
	Net.weight(kg)			1050	1100	1350	1400

BIGLUX HYBRID®

AIO Series

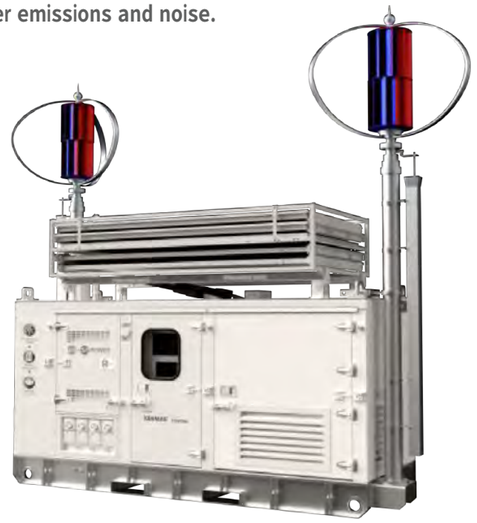
Hybrid Solutions

ALL-IN-ONE Hybrid Power Station

BIGLU X Hybrid Power Station AIO Series is an updated generation of GSB Series. Compared with the hybrid generator set of GSB Series, this ALL-IN-ONE hybrid genset consists of traditional diesel/gas generator set, solar panels, battery storage system as well as wind turbines. It helps us realizing solar self-consumption, rate arbitrage and more importantly, power independence with lower emissions and noise.

For daily power consumptions 20kWh per day, by adopting BIGLUX AIOSeries Hybrid Power Station as a 12-hours-usage electricity generation source, it might reduce the cost on fuel up to $4000 USD per year, compared with a 24kW diesel generator sets.

*The cost of the fuel is for reference only.



ISO9001:2015 Qutlity system certified

ISO14001 System certified

ISO45001 System certified

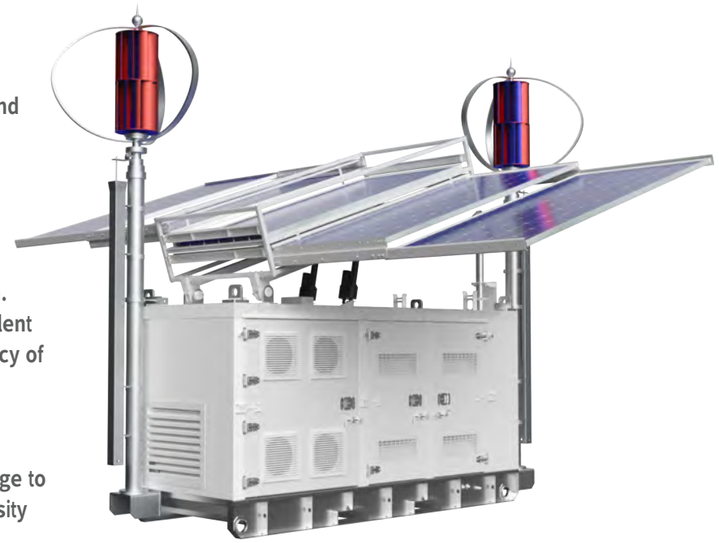
CE certified

This integrated hybrid energy system is mainly developed for independent off-grid power solutions such as telecom base station, island power supply, etc.

Taking full advantage of BIGLUX surface process technology and experience of manufacturing super silent canopied generator set, the noise of AIO Series genset is under 10 dBA while running in hybrid mode and just 65 dBA@7m when the standby diesel gener - ator is running.

Besides, as an integrated unit, it adopts a compact design for shipping so that at least four units can be delivered by a standard 40'HC container at the same time.

1. Integrated installation, convenient storage and transportation.
2. High return on investment and quick return.
3. Simple operation and easy maintenance.
4. Power and capacity can be expanded, meet different user needs.
5. Excellent cooling system for heat dissipation.
6. Beautiful design, retractable structure, excellent anti-attenuation performance and high efficiency of BIGLUX solar powered system.
7. Visualized smart control system to monitor operation status.
8. Reliable lithium iron phosphate battery storage to ensure compact structure with high power density and long lifespan.
9. Accept customer customization, suitable for various scenarios.



Specification

*Customization available

MODEL				BL-AIO-10	BL-AIO-20		BL-AIO-30
LFP Battery Energy Storage System @50Hz/60Hz	LFP Battery	Capacity kWh	Min	10	20	50	30
			Max	40	40	60	60
		HV/LV		LV	LV		HV
	Hybrid Inverter		Model	MIV-10	MIV-10*2		MIV-30
			kVA	10	20		30
			Phase	3	3		3
	Cooling System			Fan/HVAC	Fan/HVAC		HVAC
Generator Set @50Hz/60Hz	Rated Power (Prime@ISO 8528)		kW	16	16	24	16
			kVA	20	20	30	20
	Fuel Tank		L	100	200		200
Solar Panel	Panel Power		W	460	460		420
	Total Power		W	2300	2300		5040
Wind Turbine	Unit Rated Power		W	400	400		400
	Total Power		W	800	800		800
Dimensions	Loading		L*W*H(mm)	3400*1150*2500	3400*1150*2500	4450*1150*2500	3950*2280*2230
	Loading Qty		20GP	N/A	N/A	N/A	1
			40HC	6	6	4	3
	Expand		L*W*H(mm)	4400*5500*7000	4400*5500*7000	4900*5500*7000	4900*5500*7000
	Net.weight(kg)			3400	3500	3600	3600

BIGLUX HYBRID ®

GSB Series

Hybrid Solutions
For Independent Power

ISO9001:2015 Qutlity system certified

ISO14001 System certified

ISO45001 System certified

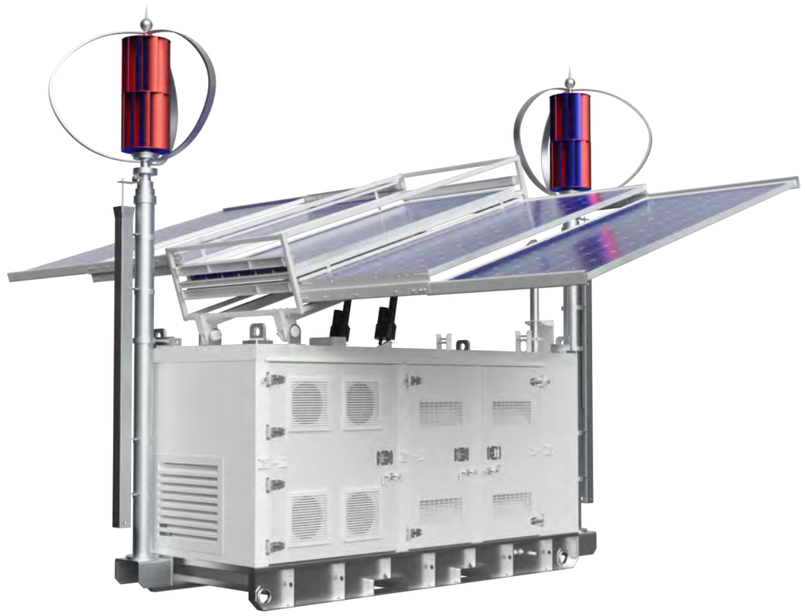
CE certified

Design Standard

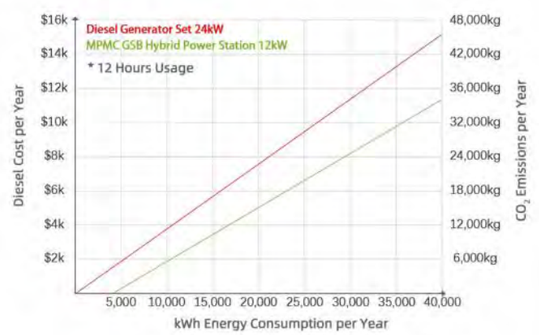
BIGLUX Hybrid Power Station GSB Series is a reliable resilient/prime energy solution mainly developed for independent power.
To live green while ensuring stable off-grid power source, GSB Series integrates diesel generator set (gas generator set foroption), solar power, battery storage and hybrid solar inverter in one secure unit.
It helps customers realizing solarself-consumption, rate arbitrage and more importantly, power independence.

Features

- Integrated installation, convenient storage and transportation.
- High return on investment and quick return.
- Simple operation and easy maintenance.
- Power and capacity can be expanded, meet different user needs.
- Excellent cooling system for heat dissipation.
- Beautiful design, retractable structure, excellentanti-attenuation performance and high efficiency of BIGLUX Solar Powered System.
- Visualized smart control system to monitor operation status.
- Reliable Lithium Iron Phosphate Battery Storage to ensure compact structure with high power density and long lifespan.
- Accept customer customization, suitable for various scenarios.



For household daily power consumption <15kWh per day, by adopting MPMC GSB Series Hybrid Power Station as a 12-hours-usage electricity generation source, it costs only $119.29 USD on fuel per year, while it costs $2312 USD on fuel per year for a 24kW diesel generator sets.



Specification

*Customization available

MODEL				BL-GSB-10	BL-GSB-20		BL-GSB-30
LFP Battery Energy Storage System @50Hz/60Hz	LFP Battery	Capacity kWh	Min	10	20	50	40
			Max	40	40	60	60
		HV/LV		LV	LV		LV
	Hybrid Inverter		Model	MIV-10	MIV-10*2		MIV-30
			kVA	10	20		30
			Phase	3	3		3
	Cooling System			Fan/HVAC	Fan/HVAC		Fan/HVAC
Generator Set @50Hz/60Hz	Rated Power (Prime@ISO 8528)		kw	16	16	24	24
			kVA	20	20	30	30
	Fuel Tank		L	100	200		200
Solar Panel	Panel Power		W	460	460		460
	Total Power		W	2300	2300		2300
Dimensions	Loading		L*W*H(mm)	2950*1150*2250	2950*1150*2250	3650*1150*2250	3650*1150*2250
	Loading Qty		20GP	4	4	2	1
			40HC	8	8	6	3
	Expand		L*W*H(mm)	2950*5500*3350	2950*5500*3350	2950*5500*3350	3650*5500*3350
	Net.weight(kg)			3000	3100	3400	3400

BIGLUX HYBRID®

GB Series

Hybrid Solutions

For Greener Power Solutions

Design Standard

GB is a new range of secure integrated hybrid power station. With diesel generator, Battery storage and Hybrid solar Inverter in one secure unit for option. GB is mainly developed for lower emission, Reduce the dependence on Main Power and decrease the consumption cost.

Benefits

- Integrated installation, convenient storage and transportation;
- High return on investment and quick return;
- Simple operation and easy maintenance;
- Power and Capacity can be expanded, meet different user needs;
- Accept customer customization, suitable for various scenarios;

Warranty

- Battery Performance: 6000 cycles(80% DOD) or 3 years after manufacture;
- Generator: 18 months after manufacture or 1500 hours running time;

ISO9001:2015 Qutlity system certified

ISO14001 System certified

ISO45001 System certified

CE certified

LFP Battery Energy Storage System @50Hz/60Hz

Why we need battery storage system that costs much more than the traditional genset providing the same power?

Reduce the impact of noise

Save money

It is more suitable for rental

Specification

*Customization available

MODEL				BL-GB-10	BL-GB-20		BL-GB-30
LFP Battery Energy Storage System @50Hz/60Hz	LFP Battery	Capacity kWh	Min	10	20	50	40
			Max	40	40	60	60
		HV/LV		LV	LV		HV
	Hybrid Inverter		Model	MIV-10	MIV-10*2		MIV-30
			kVA	10	20		30
			Phase	3	3		3
	Cooling System			Fan/HVAC	Fan/HVAC		Fan/HVAC
Generator Set @50Hz/60Hz	Rated Power (Prime@ISO 8528)		kW	16	16	24	24
			kWA	20	20	30	30
	Fuel Tank		L	100	200		200
Dimensions	Loading		L*W*H(mm)	2950*1150*1500	2950*1150*1500	3650*1150*1500	3650*1150*1500
	Loading Qty		20GP	4	4	2	2
			40HC	8	8	6	6
	Net.weight(kg)			2300	2400	2500	2500

BIGLUX HYBRID®

Hybrid Microgrids

Battery Energy Storage System + DG + Solar

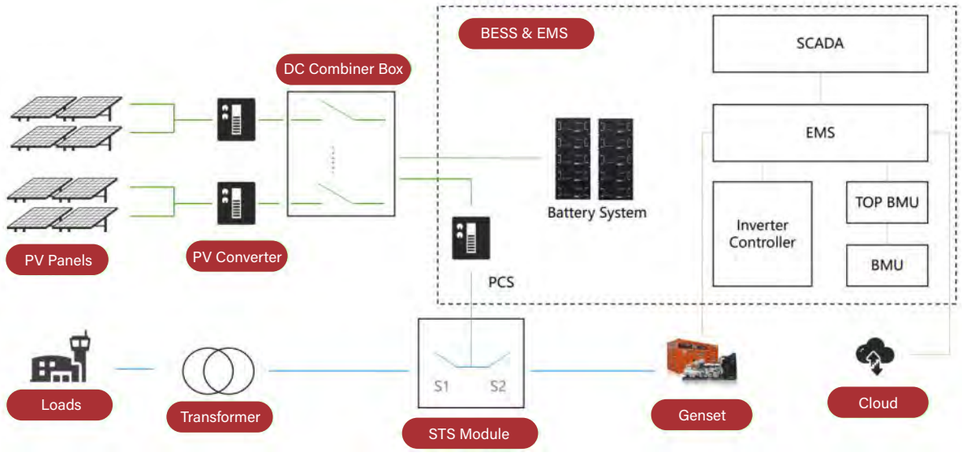
Composition of typical hybrid microgrids

Battery Energy Storage System

Solar Panel

Diesel Generator

System Diagram



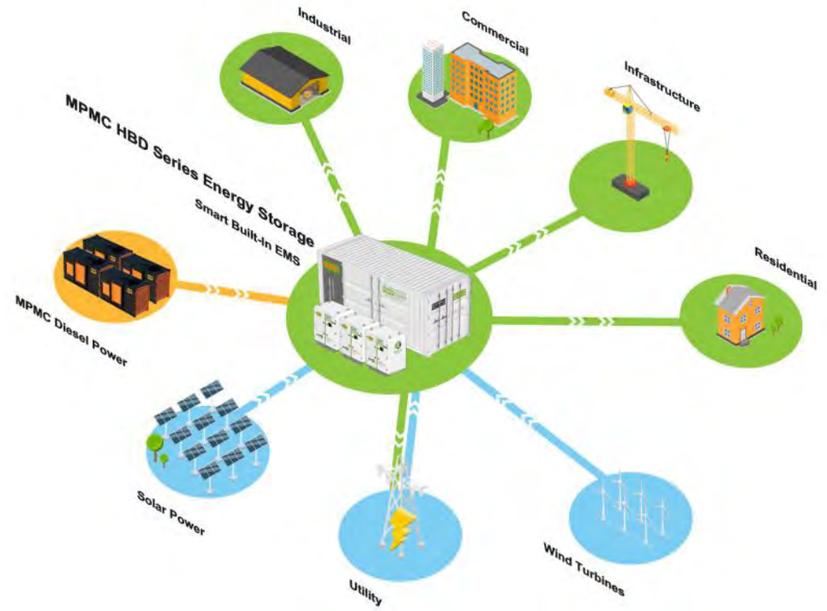
Operation Logic

Basic Design: PV+BESS as prime power, diesel generators as backup power

With EMS and SCADA, the whole power plant realizes intelligent automatic management:
1. Stabilize the power supply by weather analyzing and forecasting, and adjust the power deployment.
2. Analyze and manage the loads, working state of PV and the BESS, to maximize fuel efficiency of diesel generators.
3. Independently and flexibly adjust the operating status and distribution of power generation and loads to maximize the operating efficiency;
4. Have the ability to form a large power grid with other micro grid (HV power grid / LV power grid). Each site can communicate with each other and the master system

MORE POWER Cloud

——Weather Forecast
——Realtime remote monitroing
——Remote Alarm & diagnosis
——Realtime reports
——SL3 network security
——StarLink for communication backup



CASE STUDY

Construction / Rental

MPMC Diesel Genset Rated Power 80kW + MPMC HBD BESS 50kW-100kWh

■ Diesel Only
10 hours/day with 75% of time running at low load, consuming 26,640L fuel per year.

10h/day running

GENSET + HBD BESS

↓ 54.1% Genset + HBD Combo Fuel & CO_2 Reduction Ratio

32,314kg/CO_2 12,240L Annual Potential Saving

65kW Genset Average Output

81% Genset Average Load

■ Diesel + BESS

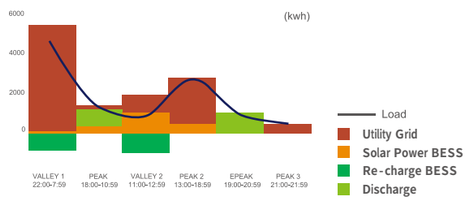
Genset charges the BESS for 1 hour twice a day; BESS supply power for the Lifter. Fuel consumption is reduced 12,240L per year.
Saving $16,105/Year
ROI in 2.6 Years

Lifter

Rated power: 3*11kW
Peak Power: 60kW
Operation: 10h/day

Self-Consumption

Arbitrage Solution



Location: South Australia

Valley: $0.056 USD/kWh
Peak : $0.1335 USD/kWh
EPeak : $0.1787 USD/kWh

Saving $164 USD/day,
$206,575 USD/year

Period of ROI 1.6 Years

Construction / Rental

BIGLUX Diesel Genset Rated Power 200kW + BIGLUX HBD BESS 250kW-400kWh

■ Diesel Only
10 hours/day with 65% of time running at low load, consuming 164,250L fuel per year.

10h/day running

GENSET + HBD BESS

↓ 37.9% Genset + HBD Combo Fuel & CO_2 Reduction Ratio

155,866kg/CO_2 59,040L Annual Potential Saving

158km Genset Average Output

79% Genset Average Load

■ Diesel + BESS

Genset charges the BESS for 1.5 hour twice a day;
BESS supply power for the tower crane as the prime power.
Fuel consumption is reduced 59,040L per year.

Saving $77,933/Year
ROI in 1.6 Years

Tower crane

Rated power: 45kW
Peak Power: 133kW
Operation: 10h/day with 2h @100% load,
1h @ 75% load, 2h @ 50% load,
3h @ 25%, 2h @0% load.

PV Panels 100kWp + BESS 300kW-300kWh

Charging Gun DC Charging Pile
Rated power 60kW*10

EV Charging

Solar + BESS

Location: Chile
ONLY 2 hours to recharge

Valley: $0.109 USD/kWh
Peak: $0.224 USD/kWh
Shoulder: $0.137 USD/kWh

Saving $66,014 USD/year
Period of ROI 2 Years

BIGLUX HYBRID®

Hybrid Solutions

Integrated, reliable and customized renewable energy

Solar & Battery & Wind

Solar & Battery
& Diesel/Gas Genset

Battery
& Diesel/Gas Genset

Battery Power Bank
(A series)

Battery Power Bank
(R series)

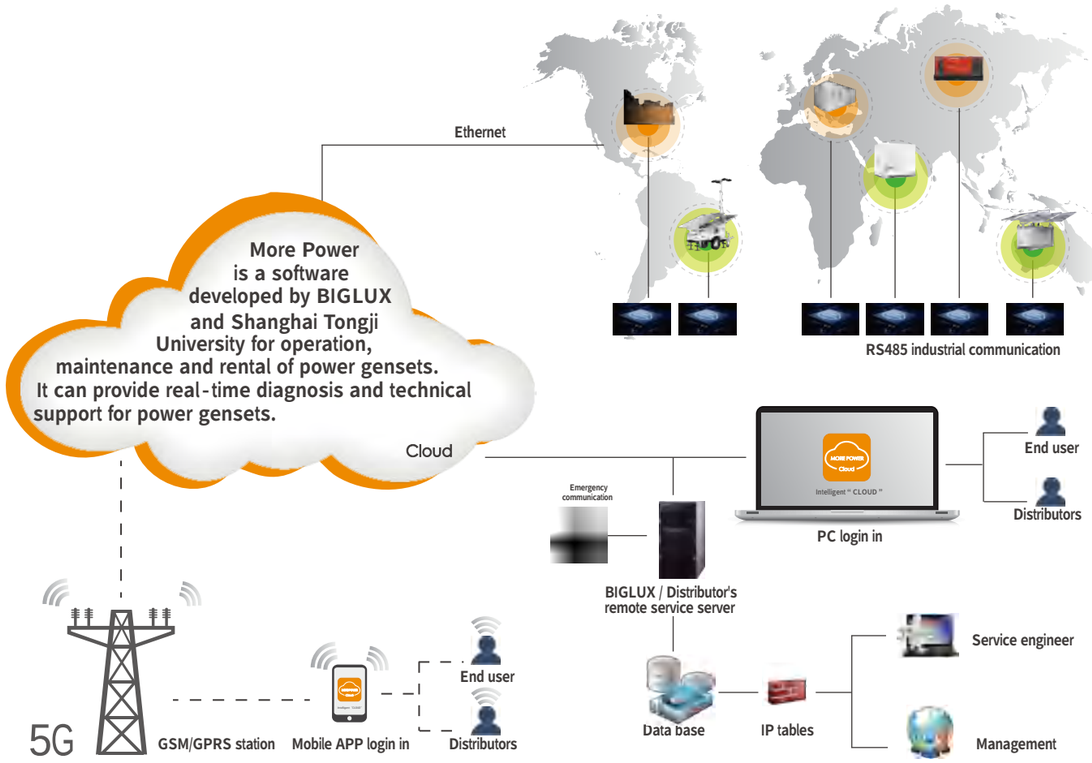
Solar & Battery & Wind
& Diesel/Gas Genset

Genset & Battery
Hybrid Lighting Tower

Solar & Battery
Solar Lighting Tower

Battery cluster

Internet Intelligent "More Power" Remote Service System



- Support all the international branded controllers
- RS485 industrial communication
- GSM/GPRS network communication
- GPS satellite system

BIGLUX Cooperated with Tongli University and developed "More Power" cloud system which focused on the power solution systems health management for operation, maintenance and rental.

More Power system includes global intelligent remote control, hierarchical management, multi-language instant messaging.after-sales service, spare parts online orders and other types of data collection. It supports PC and mobile APP.

More Power can provide real-time diagnosis and timely technical support for customers in different countries and different industries.