Honors & Certifications

Pilot has been successively awarded titles such as "National-Level Specialized and Sophisticated SME (Little Giant)", "National High-Tech Enterprise", "Guangdong Provincial Engineering Technology Research Center", and "Provincial-Level Enterprise Technology Center". It has also obtained certifications including "Quality Management System", "Environmental Management System", and "Occupational Health and Safety Management System". Pilot possesses numerous qualifications, such as "Grade 2 Contracting Qualification for Electronic and Intelligent Engineering", "Grade 2 General Contracting Qualification for Mechanical and Electrical Engineering", "Grade 2 Specialized Contracting Qualification for Building Mechanical and Electrical Installation", "Grade B Specialized Design Qualification for Building Intelligent Systems", "CMMI Level 5 Certification", "Grade 4 License for Installation, Maintenance, and Testing of Power Facilities", and the "Information System Construction and Service Capability (CS3) Certificate". Additionally, Pilot has established a testing laboratory compliant with national standards and has been granted the CNAS Laboratory Accreditation Certificate.

As a leading provider and service provider of comprehensive energy management platforms, Pilot has earned the trust of its customers. At the same time, Pilot has received widespread acclaim from professional certification bodies, industry associations, and the media. It has been recognized with honors such as "Demonstration Project by the Ministry of Housing and Urban-Rural Development", "Key Technology Demonstration Project of the '13th Five-Year Plan' National Key R&D Program for Green Buildings and Building Industrialization", "2013 Outstanding Contribution Award for Informatization in Housing and Urban-Rural Development", "Huaxia Construction Science and Technology Award", "First Prize of the China Electrotechnical Society Science and Technology Award", and has repeatedly won the title of "Top 10 Outstanding Brands in Power Distribution Systems Influencing China's Building Electrical Industry" for multiple consecutive years.



SMEs



CMMI Level 5 Certification



CMMI Level 5 Certification



National High-tech Enterprise Certification



Guangdong Provincial Engineering Technology Research Center



Excellent Engineering Project



Demonstration Engineering Project



National Key R&D Program during the 13th Five-Year Plan Period



ISO9001



ISO14000



ISO45000



CNAS



Carbon Footprint Certificate

Honors & Certifications



CE-EMC



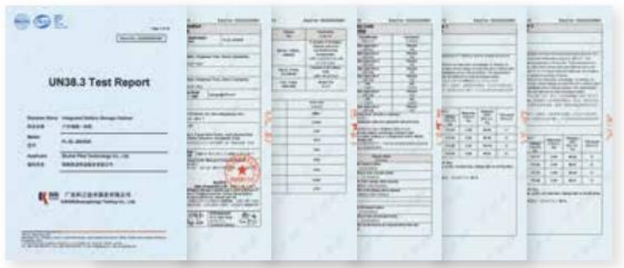
CE-LVD



MSDS



IECEE-CB



UN38.3 Test Report



Hazard Classification and Identification Report for Transport

Product Introduction



PL-EL-100/209
PL-EL-125/261
PL-EL-120/261

Safe & Reliable

- Three-level fire protection system for full-system safety.
- BMS active balancing extends battery life and ensures safety.
- AI health management detects risks in advance.

Cost-Effective & Efficient

- Multi-scenario smart control strategies for optimal revenue with one-click switching.
- Standardized interfaces enable plug-and-play operation.
- Flexible deployment and elastic expansion to fit diverse needs.

Intelligent Management

- Weak grid support for stable operation.
- Seamless on-grid/off-grid switching.
- 3S (BMS/PCS/EMS) integrated control for optimized system-wide dispatch.

Smart Operations & Maintenance

- Modular design improves maintenance efficiency.
- Cloud-edge collaborative diagnostics for real-time fault detection.
- 24/7/365 cloud-based smart monitoring & inspection.

MODEL	PL-EL-100/209	PL-EL-125/261	PL-EL-120/261
Battery Parameters			
Cell and Capacity	LiFePO4 – 314Ah		
Charge/Discharge Rate	0.5P @25℃		
Battery Module Type	1P52S*4S	1P52S*5S	
System Capacity Range	209kWh	261kWh	
System Efficiency	Annual ComprehensiveRTE≥88%		
AC Side On-grid Parameters			
Grid Type	3L/N/PE		
Rated Power	100kW	125kW	120kW
Rated Voltage	AC 400V		
Grid Voltage Range	±15%		
Freq. Range	50Hz	50Hz	50/60Hz（±2.5Hz）
Rated Current	160A	180A	173.2A
Harmonics	≤3%（@Rated Power）		
AC Side Off-grid Parameters			
Grid Type	3L/N/PE		
Rated Power	100kW	125kW	120kW
Freq. Range	50Hz	50Hz	50/60（±0.2)Hz
Rated Voltage	AC 400V		
Environmental Parameters			
Operating Humidity	0~95%（no condensing）		
Operating Temperature*	-20℃~50℃		
Operating Altitude**	3000m		
System Parameters			
Ingress Protection	IP54（PACK IP65）		
Anti-Corrosion Grade	C3		
Cooling	Liquid Cooling		
Communication Interface	RS485，Ethernet，CAN		
Protocol	Modbus RTU，Modbus TCP/IP，CAN2.0		
Parallel Operation Units	On-grid:20 units; Off-grid:12 units		On-grid:10units; Off-grid:3units
Firefighting System	Cabinet-level aerosol+Perfluorohexone PACK-level Fire Suppression+Water-based Fire Protection		
Cycle Life	≧8000 @25±3℃，0.5P，95%DOD，80%SOH		
Standards	GB/T36276，IEC62619，IEC62477，IEC61000，UN38.3		IEC62619，IEC62477，IEC61000，IEC62040，UN38.3
Dimension（H*W*D）	2350*1100*1400mm		
Weight	2.33 tons	2.65 tons	2.65 tons
Noise Emmision	≤80dB		

* Derating Due to Overtemperature > 45℃

** Derating Due to High Altitude ≧ 2000m

Product Introduction



PL-EL-250/836-G400
PL-EL-400/836-G400
PL-EL-215/836-G690
PL-EL-400/836-G690

Safe & Reliable

- Three-level fire protection system for full-system safety.
- BMS active balancing extends battery life and ensures safety.
- AI health management detects risks in advance.

Cost-Effective & Efficient

- Multi-scenario smart control strategies for optimal revenue with one-click switching.
- Standardized interfaces enable plug-and-play operation.
- Flexible deployment and elastic expansion to fit diverse needs.

Intelligent Management

- Universal high/low voltage model coverage.
- Multi-scenario support including dynamic capacity expansion, load control, and demand response.
- 3S (BMS/PCS/EMS) integrated control for optimized system-wide dispatch.

Smart Operations & Maintenance

- Modular design improves maintenance efficiency.
- Cloud-edge collaborative diagnostics for real-time fault detection.
- 24/7/365 cloud-based smart monitoring & inspection.

MODEL	PL-EL-250/836-G400	PL-EL-400/836-G400	PL-EL-215/836-G690	PL-EL-400/836-G690
Battery Parameters				
Cell and Capacity	LiFePO4-314Ah			
Charge/Discharge Rate	0.3P @25℃	0.5P @25℃	0.25P @25℃	0.5P @25℃
Battery Module Type	1P208S*4P		1P416S*2P	
System Capacity Range	836kWh			
System Efficiency	Annual ComprehensiveRTE≥88%			
AC Side On-grid Parameters				
Grid Type	3L/PE	3L/N/PE	3L/PE	
Rated Power	250kW	400kW	215kW	400kW
Rated Voltage	AC400V		AC690V	
Grid Voltage Range	± 15%			
Freq. Range	50Hz			
Rated Current	360A	577A	179.9A	334.7A
Harmonics	≤3%(@Rated Power)			
Environmental Parameters				
Operating Humidity	0~95% (no condensing)			
Operating Temperature*	-20℃~50℃			
Operating Altitude**	3000m			
System Parameters				
Ingress Protection	IP54 (PACK IP65)			
Anti-Corrosion Grade	C3			
Cooling	Liquid Cooling			
Communication Interface	RS485, Ethernet, CAN			
Protocol	ModbusRTU, ModbusTCP/IP, CAN2.0			
Parallel Operation Units	On-grid/Off-grid: 6 units	On-grid:6 units Off-grid:3 units	On-grid/Off-grid: 12 units	On-grid/Off-grid: 6 units
Firefighting System	Cabin-level aerosol+Perfluorohexone PACK-level Fire Suppression+Water-based Fire Protection			
Cycle Life	≧7000 @25±3℃, 95%DoD, 80%EOL			
Standards	GB/T36276, IEC62619, IEC62477, IEC61000, UN38.3			
Dimension (H*W*D)	2500*2800*1400mm			
Weight	7.7 tons	7.8 tons	7.65 tons	7.75 tons
Noise Emmision	≤80dB			

* Derating Due to Overtemperature > 45℃

** Derating Due to High Altitude ≧ 2000m

Product Introduction



BEVC3107

High-power DC fast charging

- Fast charging technology supports high-power DC charging (120kW), compatible with mainstream electric vehicles, reducing charging time.

Battery safety

- Uses high-stability cells + BMS (Active balancing) intelligent management system to monitor the battery's health status in real-time, preventing the risk of thermal runaway.

Flexible energy allocation

- Equipped with a high-capacity battery system, supports peak shaving and valley filling.

Smart Operations & Maintenance

- Supports cloud platform management, enabling real-time monitoring of equipment status, electricity consumption, and fault warnings. It can be remotely controlled through PC.

MODEL		BEVC3107	
Battery Parameters			
Battery Cell		Lithium-ion (LFP) 3.2V/314Ah	
Energy Storage capacity		208.99kWh	
Dis/Charging rate		≤0.5C	
Cooling system		Liquid cooled by air-cooled chiller	
Cycle life		>6000 cycles@0.5C, 25℃,70%SoH	
Ambient temp. range		-20~50℃	
Humidity Humidity		5% - 95% RH no condensing	
Storage temp.		-20℃~+60℃	
Certificate		CE/ IEC62619	
Electrical System（infeed)			
AC rated power		ACDC module 30kW/ 60kW	PCS module 30kW/ 60kW (B2G)
AC voltage		380V/400V (50Hz)	
Grid type		3L+PE	
PV DC coupling input		MPPT module 30/ 60kW (optional)	
DC input voltage		625Vdc~850Vdc	
EV Charger system			
Output	Number of guns	2 DC guns	
	Charging plug	CCS2	
	Voltage range	150Vdc-1000Vdc	
	Max. output power	DC 120kW	
	DC charging distribution	Flexible allocation	
Info sys.	HMI	7inch touch screen	
	Payment sys.	RFID card/ EFTPOS (optional)	
	Charging cable	5m/gun	
	Power meter	cl. 1.0	
	Communication	Ethernet, 4G, WiFi	
	Protocol	OCPP / MQTT	
Others			
SPD		Level C	
IP&IK ranking		IP54/ IK10	
Altitude		≤2000m	
Dimensions（H*W*D）		2350*1300*1430mm	
Weight		2.5 ton	
Cabinet Transportation		Forklift or hoist	
Warranty		2years (extended warranty available)	

Product Introduction



PL-EL-5000

Safe & Reliable

- Three-level fire protection system for full-system safety.
- BMS active balancing extends battery life and ensures safety.
- AI health management detects risks in advance.

Cost-Effective & Efficient

- Multi-scenario smart control strategies for optimal revenue with one-click switching.
- Full liquid cooling with smart temperature control-extends system life, lowers auxiliary power consumption.
- Configuration options: DC-only / AC-DC integrated / Separate AC+DC cabinet

Intelligent Management

- Cluster-to-cluster management with zero inter-cluster circulation current, boosting system power generation efficiency.
- Multi-scenario support including dynamic capacity expansion, load control, and demand response.
- 3S (BMS/PCS/EMS) integrated control for optimized system-wide dispatch.

Smart Operations & Maintenance

- Modular design improves maintenance efficiency.
- Cloud-edge collaborative diagnostics for real-time fault detection.
- 24/7/365 cloud-based smart monitoring & inspection.

MODEL	PL-EL-5000
Battery Parameters	
Cell and Capacity	LiFePO4 – 314Ah
Charge/Discharge Rate	0.5P @25℃
Battery Module Type	1P52S*8S*12P
System Capacity Range	5015.96 kWh
Rated Voltage	1331.2V
Operating Voltage Range	1040~1497.6V
Environmental Parameters	
Operating Humidity	≤95% (no condensing)
Operating Temperature*	-20℃~50℃
Operating Altitude**	3000m
Storage Temperature Range	-20℃~45℃
System Parameters	
Ingress Protection	IP54
Anti-Corrosion Grade	C3
Cooling	Liquid Cooling
Communication Interface	RS485，Ethernet，CAN
Protocol	IEC61850，IEC104，Modbus RTU，Modbus TCP/IP，CAN2.0
Firefighting System	Perfluorohexone PACK-level Fire Suppression+Water-based Fire Protection+ Explosion-proof Ventilation System
Cycle Life	≥6000 @25±3℃，0.5P，95%DoD，80%EOL
Standards	IEC62619，GB/T 36276，UN38.3
Dimension (H*W*D)	2896*6058*2438mm
Weight	42 tons

* Derating Due to Overtemperature > 45℃

** Derating Due to High Altitude ≧ 2000m

Product Introduction



PL-EL-2500/5000-S
PL-EL-2500/5000-G

Safe & Reliable

- Three-level fire protection system for full-system safety.
- BMS active balancing extends battery life and ensures safety.
- AI health management detects risks in advance.

Intelligent Management

- Cluster-to-cluster management with zero inter-cluster circulation current, boosting system power generation efficiency.
- Multi-scenario support including dynamic capacity expansion, load control, and demand response.
- 3S (BMS/PCS/EMS) integrated control for optimized system-wide dispatch.

Cost-Effective & Efficient

- Multi-scenario smart control strategies for optimal revenue with one-click switching.
- Full liquid cooling with smart temperature control-extends system life, lowers auxiliary power consumption.
- Configuration options: DC-only / AC-DC integrated / Separate AC+DC cabinet

Smart Operations & Maintenance

- Modular design improves maintenance efficiency.
- Cloud-edge collaborative diagnostics for real-time fault detection.
- 24/7/365 cloud-based smart monitoring & inspection.

MODEL	PL-EL-2500/5000-S	PL-EL-2500/5000-G
	DC Cabinet Parameters	DC Side Parameters
Cell and Capacity	LiFePO4 – 314Ah	
Charge/Discharge Rate	0.5P @25℃	
Battery Module Type	1P104S*8S*12P	1P104S*4S*12P
System Capacity Range	5015.96 kWh	
System Efficiency	Annual ComprehensiveRTE≥88%	
Rated Voltage	1331.2V	
Operating Voltage Range	1040~1497.6V	
	AC Boost Integrated Cabin Parameters	AC Side Parameters
Grid Type	3L/PE	
Rated Power	12*215kW	6*430kW
Rated Voltage	AC 690V/10kV	
Freq. Range	50Hz	
Harmonics	≤3% at full load	
	Environmental Parameters	
Operating Humidity	≤95%（no condensing）	
Operating Temperature*	-20℃~50℃	
Operating Altitude**	3000m	
Storage Temperature Range	-20℃~45℃	
	System Parameters	
Ingress Protection	IP54	
Anti-Corrosion Grade	C3	
Cooling	Liquid Cooling	
Communication Interface	RS485，Ethernet，CAN	
Protocol	IEC61850，IEC104，Modbus RTU，Modbus TCP/IP，CAN2.0	
Firefighting System	Perfluorohexone PACK-level Fire Suppression+Water-based Fire Protection +Explosion-proof Ventilation System	
Cycle Life	≥6000 @ 25±3℃，0.5P，95%DoD，80%EOL	
Standards	IEC62619，GB/T 36276，UN38.3	
Dimension（H*W*D）	DC Cabinet：2896*6058*2438mm String-Type AC Boost Cabinet：2896*6300*2438mm	3000*6058*2438mm
Weight	DC Cabinet：42 tons String-Type AC Boost Cabinet：15 tons	45 tons

* Derating Due to Overtemperature > 45℃

** Derating Due to High Altitude ≧ 2000m

Product Introduction



PL-EL-100/209-G-PA100
PL-EL-125/261-G-PA100

Safe & Reliable

- Three-level fire protection system for full-system safety.
- BMS active balancing extends battery life and ensures safety.
- AI health management detects risks in advance.

Cost-Effective & Efficient

- Integrated PV-Storage System--Maximizes clean energy utilization.
- Intelligent Charge/Discharge Dispatch--Optimized based on electricity pricing and load demand.
- Flexible deployment and elastic expansion to fit diverse needs.

Intelligent Management

- Weak grid support for stable operation.
- On-Grid/Off-grid Mode Switching--Multi-scenario application.
- 3S (BMS/PCS/EMS) integrated control for optimized system-wide dispatch.

Smart Operations & Maintenance

- Modular design improves maintenance efficiency.
- Cloud-edge collaborative diagnostics for real-time fault detection.
- 24/7/365 cloud-based smart monitoring & inspection.

MODEL	PL-EL-100/209-G-PA100	PL-EL-125/261-G-PA100
Battery Parameters		
Cell and Capacity	LiFePO4 – 314Ah	
Battery Module Type	1P52S*4S	1P52S*5S
System Capacity Range	208.99 kWh	261kWh
System Efficiency	Annual ComprehensiveRTE≥88%	
AC Side On-grid Parameters		
Grid Type	3L/N/PE	
Rated Power	100kW	125kW
Rated Voltage	AC 400V	
Grid Voltage Range	±15%	
Grid Freq. Range	50 Hz	
Rated Current	144A	180A
Harmonics	≤3% (@Rated Power)	
AC Side Off-grid Parameters		
Grid Type	3L/N/PE	
Rated Power	100kW	125kW
Rated Voltage	AC 400V	
Grid Freq. Range	50Hz	
PV-Side Parameters		
Max. PV Input Power	100kW	
MPPT Voltage Range	200~1000V	
Max. DC Input Current	45A *8	
Maximum DC Short-Circuit Current	56.5A *8	
Freq. Range	50Hz	
Rated Voltage	3L/N/PE AC 230/400V	
PV Inverter Efficiency	98.8% max	
Environmental Parameters		
Operating Humidity	0-95% (no condensing)	
Operating Temperature*	-20℃~50℃	
Operating Altitude**	3000m	
System Parameters		
Ingress Protection	IP54	
Anti-Corrosion Grade	C3	
Cooling	Liquid Cooling	
Communication Interface	RS485, Ethernet,CAN	
Protocol	Modbus RTU, Modbus TCP/IP,CAN2.0	
Parallel Operation Units	On-grid:20 units; Off-grid:12 units	
Firefighting System	Cabinet-level aerosol+Perfluorohexone PACK-level Fire Suppression+Water-based Fire Protection	
Dimension (H*W*D)	2350*1100*1715mm	
Weight	2400 ± 50 kg	2700 ± 50 kg
Noise	≤80dB	

* Derating Due to Overtemperature > 45℃

** Derating Due to High Altitude ≧ 2000m