

ecobat

BATTERY



Battery Energy Storage Systems



Approved European Distributors for Pylontech Battery Energy Storage Systems

PYLONTECH Product Portfolio

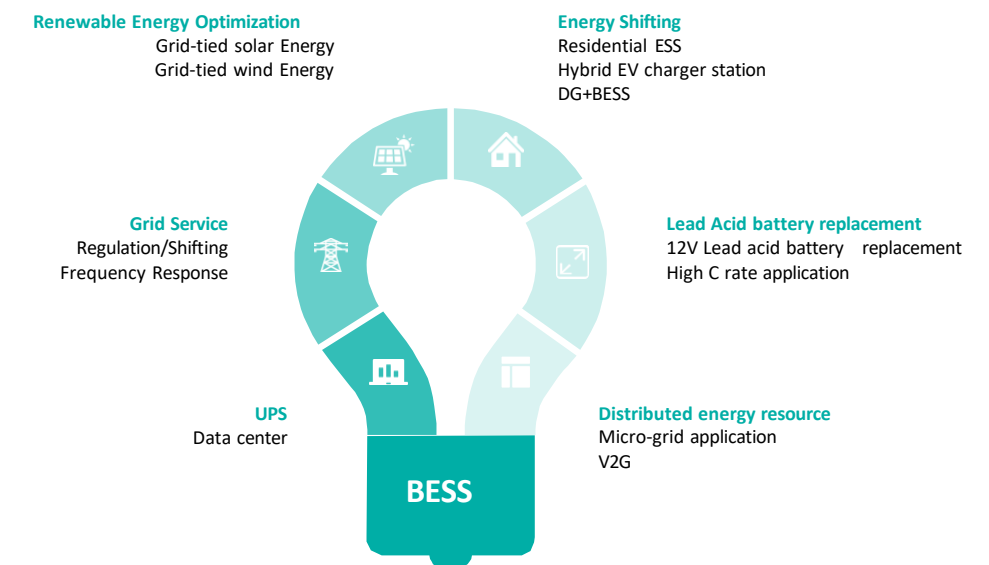
03.12V Series - All Purpose Lithium Ion Battery

04. Residential - Battery Energy Storage Systems (BESS)









09. Utility ESS

11. Ecobat Lithium Services

Main Applications



Core Strengths


 More than 10 years technology accumulation for reliable BESS	 The safety and stability of battery has been protected by our own cells, modules and BMS	 All R&D, manufacturing, supplying and marketing are long-life-cycles driven.	 Flexible modularization and rack solution for various demands.
 500,000+ Global Residential ESS	 TOP 2 Global residential ESS Supplier	 4.5GWH+ ESS Battery Delivered	 Flexible battery solutions 12V~1500V battery




12V Series

All Purpose Lithium Ion Battery


Intelligent Battery Management System




Temperature Protection




Over-Voltage Protection




Over-Current Protection



Heating Film



Parallel & Serial Balancing Strategy



Short-circuit Protection

KEY FEATURES

Ultra-Safety
The battery management system (BMS) provides comprehensive protection to the battery and manages the charging/discharging process wisely.

Auto-Balance
Connects multiple batteries in parallel safely without internal state non-uniformity issues.

Uncompromising Quality
State-of-the-art battery cells ensure a lifespan of more than 6000 cycles, 100A continuous discharge current, and a wide range of operation temperature.

Communication
CAN, RS485, Blue Tooth, Dry Contact enable data transmission to meet the needs of different usage scenarios.



SPECIFICATION (12V)






Model	RT12100G31
Electrical	
Nominal Voltage(V)	12.8
Nominal Capacity(Ah)	100
Working Voltage Range(VDC)	10.8~14.4
Internal Resistance(mΩ)	<20
Charge Voltage(VDC)	14V-14.4
Nominal Operation Current(A)	50
Max. continuous operation current(A)	100
Peak Current(A)	200@30sec
Serial Connection	≤4 pcs
Parallel Connection	≤4 pcs
Structure	
Dimension (mm)	325*173.5*226
Weight(Kg)	13±0.2
IP rating	IP67
Power Terminal	M8 bolt
Working Environment	
Charge working temperature (°C)	0~60
Discharge working temperature (°C)	-20~60
Working temperature (°C)	-40~60*
Altitude (M)	<4,000
Humidity(RH)	5~95%(w/o condensing)
Communication	
RS485	115200bps
CAN	500Kbps
Bluetooth	BLE5.0
Dry contactor	2×inputs & 2×outputs
Certification	
SAE J930, SAE J1455, UL1973, IEC62619,FCC,CE, Bluetooth SIG, UN38.3	

*During -40 °C ~ -20°C, only heater will be enabled for heating up the module, battery cannot charge/ discharge during such period.





Your ideal Residential BESS

-  **Safety**
Multi-protection from self developed BMS
-  **Optimal Electricity Cost**
Long cycle life and superior performance
-  **Compact Size & Easy installation**
Module design help for quick installation
-  **Easy to Scale Up**
Be workable to be parallel based on 48V
-  **Compatibility**
Compatible with Tier 1 inverter brands






Complete Safety Certification

Product Lineup

48 V	
Cabinet/rack installation	Quick connector
US2000C (2.4 kWh)	Force L1 (7.1~24.86 kWh)
Phantom-S(2.4 kWh)	Force L2 (7.1~14.2 kWh)
US3000C (3.55 kWh)	
US5000 (4.8 kWh)	

SPECIFICATION (48V)

Model			
Basic Parameters			
Nominal Voltage (Vdc)	48	48	48
Nominal Capacity(Wh)	2400	3552	4800
Usable Capacity(Wh)	2280	3374	4560
Dimension(mm)	442*410*89	442*420*132	442*420*161
Weight(kg)	24	32	39.5
Charge/ Discharge Current(A)	(Recommend)	25	37
	(Max)	89@1min	89@601min
	(Peak)	200@15sec	200@15sec
Communication Port		RS485, CAN	
Single string quantity(pcs)		16	16
Working Temperature/ °C		0~50	
Shelf Temperature/ °C		-20~60	
Cycle Life	> 6000, 25°C	> 6000, 25°C	> 6000, 25°C
Authentication Level	IEC62619/CE UN38.3	VDE2510-50 IEC62619/UL1973 UL9540A/CE/UN38.3	IEC62619/UL1973 /UL9540A/CE /UN38.3

Residential BESS

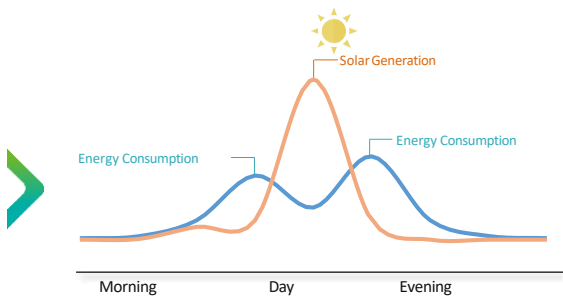
Save costs, save the planet, with our battery storage.
So future generations can enjoy a safe and clean environment



How to save cost from Residential ESS?

Self-Consumption Optimization

High energy demand in the morning and evening but solar generation is most sufficient during the Mid-Day. Battery Storage system balance the feeding and demands. Realize your grid independence.

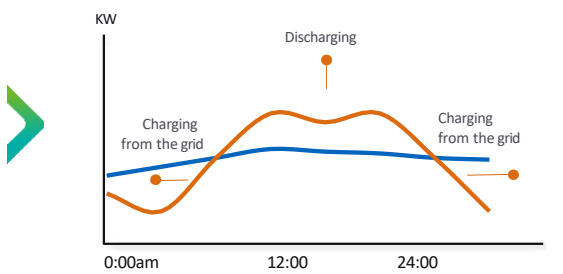


Benefits from Peak Shaving

House: Load Shifting

Store the power during low-peak and use the energy at peak-time. Save the money which happens arising from peak rate.

Transmission&Distribution: peak Shaving Save on the electricity bills by reducing peak demand



VPP Revenue

VPP creates a network of renewable energy sources and battery storage systems, connected through a cloud-based technology that manages the stability of clean electricity to maximize your revenue.

Enabling a cost reduction, as well as boosting the system's efficiency



Pylontech
has been serving over

500,000+

Residential ESS globally from 2014



OUR RELIABILITY IS PROVEN



Utility ESS

- 
Peak Shifting
/Multi Purpose
- 
Frequency
Integration
- 
Renewable
Regulation

SPECIFICATION

Powercube M2
100~1000V



Basic Parameters	Powercube-M2A-180 (729.6V148Ah)
Battery System Capacity(kWh)	107.98
Battery Module	HM2A180
Battery system Voltage(V)	729.6
Battery System Voltage Range (V)	615.6~820.8
Efficiency(@0.5C-rate)	96%
Depth of Discharge	90%
Dimension (W*D*H mm)	803*845*2130
Weight(kg)	1228
Design Life	15+Years
Operation Temperature (°C)	10~40
Humidity	5%~95%
Altitude	<2000
Battery Module Qty.(Optional)	1~19 pcs
Authentication level	IEC62619/CE/UN38.3

Powercube M3
100~1400V



Basic Parameters	Powercube-M3A-100 (729.6V148Ah)	Powercube- M3A-180 (1113.6V148Ah)
Battery Module	HM3A100	HM3A180
Battery System Capacity(kWh)	107.98	164.81
Battery system Voltage(V)	729.6	1113.6
Battery System Voltage Range (V)	615.6~820.8	939.6~1252.8
Efficiency(@0.5C-rate)	96%	96%
Depth of Discharge	90%	90%
Dimension (W*D*H mm)	803*845*2130	1185*845*2130
Weight(kg)	1228	1798
Design Life	15+Years	15+Years
Operation Temperature (°C)	10~40	10~40
Humidity	5%~95%	5%~95%
Altitude	<2000	<2000
Battery Module Qty.(Optional)	1~19 pcs	1~29 pcs
Authentication level	UL1973/IEC62619/CE /UN38.3/UL9540A	IEC62619/VDE2510-50 /CE/UN38.3

SPECIFICATION



Basic Parameter	20ft High Voltage System Container		40ft High Voltage System Container	
Container System Type	Powercube-20H-M1		Powercube-40H -M1	
System Charge/Discharge Rate	0.5C		0.5C	
System Voltage Range(V)	736(690~828)		736(690~828)	
System Capacity(kWh)	1296		2592	
Container System Type	Powercube-20H-M2		Powercube-40H -M2	
System Charge/Discharge Rate	0.5C	0.5C	0.5C	0.5C
System Voltage Range(V)	806(680~907)	1228(1036~1382)	806(680~907)	1228(1036~1382)
System Capacity(kWh)	1432	1454	2983	3273
Container System Type	Powercube-20H-M3		Powercube-40H -M3	
System Charge/Discharge Rate	0.5~1C	0.5~1C	0.5~1C	0.5~1C
System Voltage Range(V)	806(680~907)	1228(1036~1382)	806(680~907)	1228(1036~1382)
System Capacity(kWh)	1194	1091	2625	2546
Dimension (L*W*H, M)	6.058*2.438*2.896		12.192*2.438*2.896	
Ambient Temperature (°C)	-20~50			
Communication	CANBUS/Modbus TCP/IP			



ECOBAT LITHIUM SERVICES

Driving lithium-ion and battery technologies into the future.

In supporting future energy and material lifecycle needs for emerging battery systems, Ecobat Solutions has been highly active in the development of advanced technologies and processes for recycling and resource recovery for Lithium-ion and other battery chemistries. We are the only European provider of fully integrated Stage 1-3 lithium battery recycling services and management services for Stage 4.

