



LOW VOLTAGE ENERGY STORAGE SYSTEM -FOR RESIDENTIAL AND SME

Pylon Technologies Co., Ltd.

As the leading vertically integrated manufacturer of lithium iron phosphate battery systems, Pylontech has provided various battery solutions for nearly all kinds of ESS applications.

Thanks to our self-developed core technology in cells/BMS/system design, Pylontech has delivered more than 2.0GWH batteries serving 120,000+ users.



Vertical industry integration chain



Advantage

- Developed with our own LFP (lithium iron phosphate) cell to ensure the highest safety
- Self-designed BMS protects the cell in all angels such as abnormal temperature, current, voltage, SoC, SoH
- Vertical industry integration ensures more than 6000 cycles with 95% DoD
- Modular design gives the end customers the power of choice of capacity
- Compatible with most of the available Hybrid inverters
- Simple buckle fixing minimize the installation time and cost
- Backward compatibility with existing US series product
- Pre-charge function to protect ESS system from surge current









Specification







Basic Parameters	U\$2000C	U\$3000C	Phantom-S	
Nominal Voltage (V)	48	48	48	
Nominal Capacity (Wh)	2400	3552	2400	
Usable Capacity (Wh)	2280	3374.4	2200	
Dimension (mm)	442*410*89	442*420*132	440*440*88.5	
Weight (Kg)	24	32	24	
Discharge Voltage (V)	44.5 ~ 53.5	44.5 ~ 53.5	44.5 ~ 53.5	
Charge Voltage (V)	52.5 ~ 53.5	52.5~53.5	52.5~53.5	
Charge / Discharge Current	25(Recommend)	37 (Recommend)	25(Recommend)	
	50 (Max)	74 (Max)	50 (Max)	
	90 (Peak@15s)	90 (Peak@15s)	100 (Peak@15s)	
Communication Port	RS485, CAN	RS485, CAN	RS485, CAN	
Single string quantity(pcs)	16	16	8	
Working Temperature/℃	0~50	0~50	0~50	
Shelf Temperature/℃	-20~60	-20~60	-20~60	
Humidity	5%~95%	5%~95%	5%~95%	
Altitude (m)	<2000	<2000	<2000	
Design life	15 ⁺ Years (25 °C/77°F)	15 ⁺ Years (25°C/77°F)	15^{+} Years (25°C/77°F)	
Cycle Life	>6000, 25 ℃	>6000, 25 °C	>6000, 25 °C	
Authentication Level	IEC62619/CE /UN38.3	VDE2510-50/IEC62619/UL1973 UL9540A/CE/UN38.3	IEC62619/CE /UN38.3	
Feature	Pre-Charge Dual-active protection Flexible current steps Dry contact wake up	Pre-Charge Dual-active protection Flexible current steps Dry contact wake up		

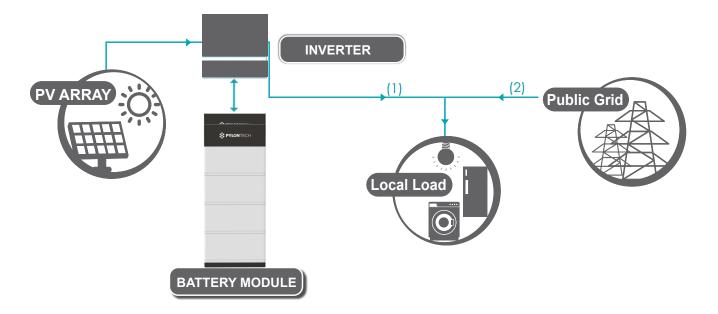
PYLONTECH FORCE SERIES

Pylontech Force L1 is the latest version of HESS (home energy storage system), inherit with our modular design concept, combined win easy installation, simple connectors and outdoor compatibility, the furniture type of equipment is your ideal place to hold your valuable force - the electricity.

Advantages

- 1. Modular design gives highest flexibility
- 2. LFP cell inside enable longest life and highest safety
- 3. Quick connector to save installation time
- 4. Furniture like design suits both indoor and outdoor installation
- 5. Proven BMS with widest compatiblities with inverters

Solution of ESS



Technical Specification FORCE L1

Product Type	Force L1					
Cell Technology	Li-ion(LFP)					
System Model Name	Force-L1-48-148	Force-L1-48-222	Force-L1-48-296	Force-L1-48-370	Force-L1-48-444	Force-L1-48-518
Battery System Capacity(kWh)	7.10	10.65	14.20	17.76	21.31	24.86
Battery System Usable Capacity(kWh)	6.39	9.59	12.78	15.98	19.18	22.37
Battery System Voltage(Vdc)			19	48		
Battery System Capacity(AH)	148	222	296	370	444	518
Battery Controller Name	FC0048-100S					
Battery Module Name			FL4	18074		
Battery Module Quantity(pcs)	2	3	4	5	6	7
Battery Module Capacity(kWh)	3.552					
Battery Module Voltage(Vdc)	48					
Battery Module Capacity(AH)	74					
Battery System Charge Upper-Voltage(Vdc)	53.5					
Charge/Discharge Current(Amps, Standard)	30	45	60	75	90	100
Charge/Discharge Current(Amps, Normal)	75 100					
Charge/Discharge Current(Amps, Max.@15S)		70	33	110		
Battery System Discharge lower-Voltage(Vdc)	44.5					
Battery System DC Rate Power(kW)	3.6 4.8					
Battery System DC Max. Power(kW,@15S)	5.28					
Efficiency(%, ≤0.5C-rate)	96					
Depth of Discharge(%)	90					
Dimension(W*D*H,mm)	600*380*530	600*380*700	600*380*870	600*380*1040	600*380*1210	600*380*1380
Communication	RS485\CAN					
Protection Class		IP55				
Weight (kg)	86.5	123	159.5	196	232.5	269
Operation Life(Years)	15+					
Operation Temperature(°C)	0~50					
Storage Temperature(℃)	-20-60					
Altitude(M)	<2,000					
Product Certificate	VDE2510-50, IEC62619 , CE RED, IEC62477-1, UN38.3					
Warranty	10 Years					
1) Battery Controller Dimensions (W*D*H, mm)	600×380×150					
2) Battery Module Dimensions (W*D*H, mm)	600×380×170					
3) Battery bottom base Dimensions(W*D*H, mm)	600×380×40					

Technical Specification FORCE L2

Product Type	FORCE-L2				
Cell Technology	Li-ion (LFP)				
System Model Name	Force-L2-48/148AH Force-L2-48/222AH Force-L2-48/296A				
Battery System Capacity(kWh)	7.10	10.65	14.20		
Battery System Usable Capacity(kWh)	6.39	9.59	12.78		
Battery System Voltage (Vdc)	48				
Battery System Capacity (Ah)	148	222	296		
Battery Controller Name	FC0048M-100S				
Battery Module Name	FL4874M				
Battery Module Quantity(pcs)	2	3	4		
Battery Module Capacity(kWh)		3.552			
Battery Module Voltage (Vdc)	48				
Battery Module Capacity (AH)	74				
Battery System Charge Upper-Voltage (Vdc)		53.5			
Battery System Charge/Discharge Current (Amps, Standard)	30	45	60		
Battery System Charge/Discharge Current (Amps, Normal)	75	100	100		
Battery System Charge/Discharge Current (Amps, Max.@15S)	110				
Battery System Discharge lower-Voltage (Vdc)	44.5				
Battery System DC Rate Power (kW)	3.6	4.8	4.8		
Battery System DC Max.Power(kW,@15s)	5.28				
Efficiency (%, ≤0.5C-rate)	96				
Depth of Discharge(%)	90				
Dimension(W*D*H,mm)	450*296*822	450*296*1120	450*296*1415		
Communication	RS485\CAN				
Protection Class	IP55				
Weight (kg)	82	117.5	153		
Operation Life (Years)	15+				
Operation Temperature (°C)	0~50°C				
Storage Temperature (°C)	−20~60°C				
Altitude(M)	<2,000				
	VDE2510-50, IEC62619, CE RED,				
Product Certificate	IEC62477-1, UN38.3				
Warranty	10 Years				
1) Battery Controller Dimensions(W*D*H, mm)	ry Controller Dimensions(W*D*H, mm) 450×296×190				
attery Module Dimensions (W*D*H, mm) 450×296×296					
3) Battery bottom base Dimensions(W*D*H, mm)	450×296×40				

