

## 1. Product Introduction

Force-H3 is a high voltage battery storage system based on lithium iron phosphate battery, which is one of the new energy storage products developed and produced by Pylontech. It can be used to provide reliable power for various types of equipment and systems. Force-H3 enables multiple strings parallel operation feature, which provides tremendous flexibility in system design and configuration. Force-H3 is especially suitable for those application scenes which require flexible capacity extension, high power output, limited installation space, restricted load-bearing and long cycle life.

## 2. Specifications



NOTE: The above picture is just for reference. The quantity of the battery modules is based on your practical system.

### 3. System Parameters

#### 3.1 Single String System Specifications

Specifications	Product Name						
	Force-H3-102.4/102.4-US	Force-H3-102.4/204.8-US	Force-H3-102.4/307.2-US	Force-H3-102.4/409.6-US	Force-H3-102.4/512-US	Force-H3-102.4/614.4-US	Force-H3-102.4/716.8-US
Battery Module Quantity (pc)	1	2	3	4	5	6	7
Battery System Energy (kWh)	4.966	9.932	14.898	19.864	24.83	29.796	34.762
Battery System Usable Energy (kWh)	4.966	9.932	14.898	19.864	24.83	29.796	34.762
Battery System Rated DC Power (kW)	4.966	9.932	14.898	19.864	24.83	29.796	34.762
Battery System Voltage (VDC)	102.4	204.8	307.2	409.6	512	614.4	716.8
Battery System Charge Upper Voltage (VDC)	115.2	230.4	345.6	460.8	576	691.2	806.4
Battery System Discharge Lower Voltage (VDC)	92.8	185.6	278.4	371.2	464	556.8	649.6
Dimensions (W x D x H, inch)	21.26 x 13.78 14.17 (inch ) (540 x 350 x 360 mm)	21.26 x 13.78 x 20.87 (inch) 540 x 350 x 530 mm)	21.26 x 13.78 x 27.56 (inch) (540 x 350 x 700 mm)	21.26 x 13.78 x 34.25 (inch) (540 x 350 x 870 mm)	21.26 x 13.78 x 40.94 (inch) (540 x 350 x 1040 mm)	21.26 x 13.78 x 47.64 (inch) (540 x 350 x 1210 mm)	21.26 x 13.78 x 54.33 (inch) (540 x 350 x 1380 mm)
Weight (lb)	116.8 lb (53 kg)	202.8 lb (92 kg)	288.8 lb (131 kg)	374.8 lb (170 kg)	460.8 lb (209 kg)	546.7 lb (248 kg)	632.8 lb (287 kg)
Battery Control Model	FC1000-US						
Battery Module Model	FH10050-US						
Single Battery Module Energy (kWh)	4.966						
Single Battery Module Voltage (VDC)	102.4						
Battery Module Capacity (Ah)	48.5						
Battery System Charge Current (Amps, Rated)	48.5						
Battery System	55						

Battery System Discharge Current (Amps, Normal)	48.5
Battery System Discharge Current (Amps, maximum @15 minutes)	55
Short circuit rating	3000 Amps /2 milliseconds
Depth of Discharge	100 %
Communication	CANBUS/Modbus RTU
IP Rating	IP55/I
Pollution Degree	PD3
Design Life (year)	15+
Operation Temperature (°F)	-50°F~ 131°F (-10°C~ 55°C) *
Storage Temperature (°F)	-68°F~ 140°F (-20°C~ 60°C)
Altitude (feet)	<13,123.36 ft (4,000 m)
Humidity (% RH)	5 ~ 95
Product Certificate	UL1973, UL9540A, UL9540
Transfer Certificate	UN38.3
Environmental certification	RoHS、Reach、WEEE
Single Battery Control Module Dimensions	21.26 inch (w) x 13.78 inch (D) x 5.90 inch (H) (540 x 350 x150 mm)
Single Battery Module Dimensions	21.26 inch (w) x 13.78 inch (D) x 6.69 inch (H) (540 x 350 x 170 mm)
Battery Bottom Base Dimensions	21.26 inch (w) x 13.78 inch (D) x 1.57 inch (H) (540 mm x 350 mm x 40 mm)
Country of Manufacture	China

\* In high (>104°F) or low temperature (< 50°F) environment, the charging and discharging power of the battery system will be limited according to BMS operation logic.

### 3.2 Multi-string System Parameters (maximum 6 Strings per System)

For multi-string operation, ensure that:

- The battery type in the whole system is the same.
- The battery amount of each string is the same.

Specifications	Force-H3-US in multi-strings				
Battery System Voltage (VDC)*	204.8 / 307.2 / 409.6 / 512 / 614.4 / 716.8				
Battery System string amount(pcs)	2	3	4	5	6
Battery System capacity (Ah)	97	145.5	194	242.5	291
Battery System Operation Current (Amps, Standard)	20	30	40	50	60
Battery System Operation Current (Amps, Rated)	80	120	160	200	240
Battery System Operation Current (Amps, maximum @15 minutes)	110	165	220	275	330
P-Combiner 3/6-V2 Operation Current (Amps, Normal)	50**		100**		
P-Combiner 3/6-V2 Operation Current (Amps, maximum @15 seconds)	80**		160**		

\*The Battery System Voltage varies depending on battery amount in serial per string.

\*\*The current is based on BMS theoretical operation current. If using P-Combiner 3-V2 as the combiner box of the multi-strings` battery system wiring connection, the maximum continuous operation current is 50 Amps, maximum peak operation current is 80 Amps for 15 seconds. Please make sure the real operation current not exceed the combiner box power rating.

\*The current is based on BMS theoretical operation current. If using P-Combiner 6-V2 as the combiner box of the multi-strings` battery system wiring connection, the maximum continuous operation current is 100 Amps, maximum peak operation current is 160 Amps for 15 seconds. Please make sure the real operation current not exceed the combiner box power rating.

#### CAUTION

**Caution:** DO NOT use P-Combiner-HV-3/6-V2 or similar concept of multi-strings connection method in case the multiple battery strings need to be operated independently.

**Attention:** NE PAS utiliser le P-Combiner-HV-3/6-V2 ou un concept similaire de méthode de connexion multi-chaînes au cas où les plusieurs chaînes de batteries devraient fonctionner indépendamment.