EN-SD-250424

PYLONTECH

Next Level Residential Energy Solution

Force H3X

Hybrid Solution



On-Demand Versatility

One-Stop Solution & Effortless Installation

Trustworthy Safety Design

Extraordinary Performance

Intelligent Solutions

sales@pylontech.com.cn | en.pylontech.com.cn

PYLONTECH

From Heart to Your Home

On-Demand Versatility

Single Phase/ Three Phase

Wide power range
3.6 kW to **15** kW

Single group
5-35 kWh

Max. 6 groups
210 kWh

Suitable for both residential and small-scale C&I

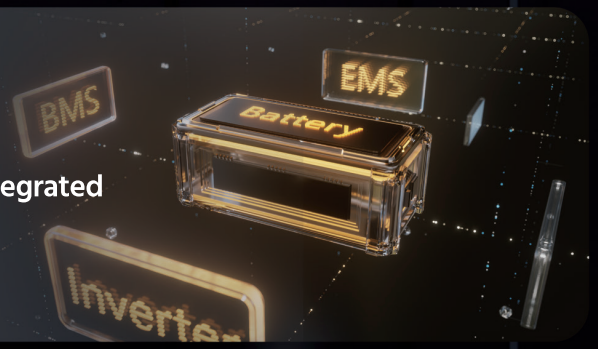


One-Stop Solution & Effortless Installation

BMS+Inverter+EMS Highly integrated

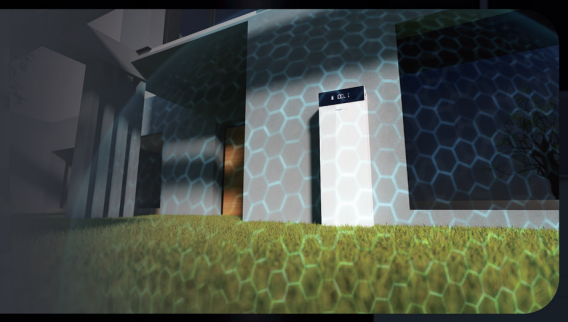
15 min Installation & commissioning

Automatic paralleling, easy set-up



Trustworthy Safety Design

- Vertical integrated manufacturing
- Reliable product safety design
- AI-driven smart protection
- Various safety certifications, unit level **UL9540A**



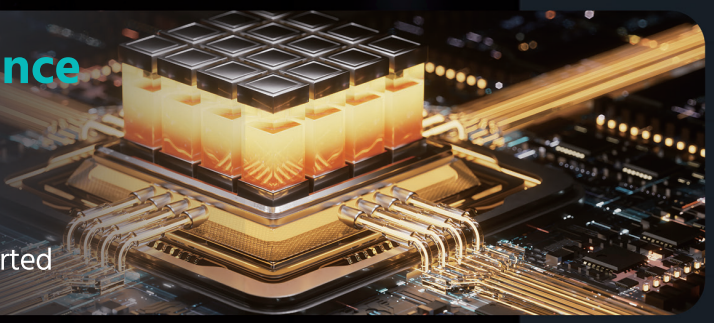
Extraordinary Performance

1 C
Rate

97%
Efficiency

8000+
Life cycles

100% Three phase load unbalance supported



Intelligent Solutions

- **Dynamic control:** Optimized energy usage strategy
- Fault diagnosis system
- Remote control of PV and heat pump



*Product specifications are subject to specific conditions. Please reach out to Pylontech's technical service for further details.

Force H3X Hybrid

Single Phase

Module	FH3X3.6K-HY-1P 5/10/15/20	FH3X5K-HY-1P 5/10/15/20	FH3X6K-HY-1P 5/10/15/20	FH3X8K-HY-1P 5/10/15/20
Main System Data				
Battery Module	FH10050			
Number of Battery Modules	1/2/3/4			
System Nominal Capacity (kWh)	5.12/10.24/15.36/20.48			
System Nominal Power (kW)	3.6	5	6	8
DC Parameter (PV Side)				
Maximum Power (kW)	5.7	8	9.6	12.8
Maximum Input Voltage (Vdc)	600			
Start Up Voltage (Vdc)	80			
MPPT Voltage Range (Vdc)	80~550			
MPPT Full Load Voltage Range (Vdc)	190~520			
Number of MPPT	2	2	2	3
Number of PV Strings Per MPPT	1			
Maximum Current (A)	16			
Short Circuit Current Per MPPT (A)	25			
Surge Protection	Type II			
DC Parameter (Battery Side)				
Maximum Continuous Charge/Discharge Current (A)	40			
Maximum Charging Power with 1 Battery(kW)	2.5			
Maximum Discharging Power with 1 Battery (kW)	2.5			
Maximum Charging Power with 2-4 Batteries (kW)	8			
Maximum Discharging Power with 2-4 Batteries(kW)	3.6	5	6	8
AC Parameter (Grid Side)				
Nominal Grid Voltage	1/N/PE a.c. 230 V			
Nominal Grid Frequency (Hz)	50/60			
Maximum Nominal Continuous Current to Grid (A)	15.7	21.7	26.1	34.8
Nominal Active Power to Grid (W)	3600	5000	6000	8000
Maximum Nominal Apparent Power to Grid (VA)	3600	5000	6000	8000
Maximum Nominal Continuous Current from Grid	23.5	32.6	39.1	52.2
Nominal Active Power from Grid (W)	5400	7500	9000	12000
Maximum Nominal Apparent Power from Grid (VA)	5400	7500	9000	12000
Power Factor Range	-0.8~+0.8			
THDi	<3%			
AC Parameter (Back-up Side)				
Nominal Voltage	1/N/PE a.c. 230 V			
Nominal Output Frequency (Hz)	50/60			
Maximum Nominal Continuous Current (A)	15.7	21.7	26.1	34.8
Maximum Nominal Apparent Power (VA)	3600	5000	6000	8000
Peak Off-Grid Power (60s)/Estimate (VA)	4320	6000	6200	9600
Power Factor Range	-0.8~+0.8			
ON/Off-Grid Switching Time (ms)	≤10			
THDv	<3%			

Efficiency	
Maximum Efficiency	98%
European Efficiency	97.5%
Protection	
Anti-Islanding protection	Yes
AFCI	2.0@IEC63027
Insulation Resistor Detection	Yes
Residual Current Monitoring Unit	Yes
Output Over Current Protection	Yes
Output Short Protection	Yes
Output Overvoltage Protection	Yes
DC Switch	Yes
DC Reverse Polarity Protection	Yes
DC/AC Surge Protection	Type II
PV Overvoltage Protection	Yes
General Data	
Dimensions (W/H/D, mm)	540*665/835/1005/1175*350
Weight (kg)	77/116/155/194
Topology	Transformerless
Operating Temperature Range (°C)*	-10~55
System Working Humidity Range	0~100%
System Working Altitude (m)*	＜4000
Common Noise Level (1 meter) (dB)	＜29
Maximum Parallel	6
Protective Class	I
Overvoltage Category	DC II /AC III
Ingress Protection	IP65
System Salt Spray Level	C5-M
Cooling	Natural Cooling
Standby Consumption (Night)	＜15W
Communication Portal	WIFI/WLAN/Bluetooth
Display	LED
EPO	Installed

Standard Compliance

UN38.3/IEC61000-6/VDE-AR-E-2510-50 2017-05/IEC62619: 2022/IEC60730-1/ISO13849/IEC62477-1: 2022
EN 62477-1: 2012+A12: 2021/IEC62109-1: 2010/IEC62109-2: 2011

VDE-AR-N-4105: 2018/DIN VDE V 0124-100: 2020/EN50549-10/EN50549-1/PPDS Annex: 2022+EN50549-10/C10/11+EN50549-10/EIFS+EN50549-10/
CEI0-21/RD1699 RD661 RD413/UNE 217002: 2020/NTS Version 2.1: 2021/UNE 217001: 2021/AS 4777. 2/AS60947. 3/G98/G99/TOR

* When the ambient temperature exceeds 45°C, the PCS will reduce the power
* When the altitude exceeds 2000m, the PCS will degrade the power

Force H3X Hybrid

Three Phase

Module	FH3X-8K-HY-3P 10/15/20/25/30/35	FH3X-10K-HY-3P 10/15/20/25/30/35	FH3X-12K-HY-3P 10/15/20/25/30/35	FH3X-15K-HY-3P 10/15/20/25/30/35
Main System Data				
Battery Module	FH10050			
Number of Battery Modules	2/3/4/5/6/7			
System Nominal Capacity (kWh)	10.24/15.36/20.48/25.6/30.72/35.84			
System Nominal Power (kW)	8	10	12	15
DC Parameter (PV Side)				
Maximum Power (kW)	12.8	16	19.2	24
Maximum Input Voltage (Vdc)	1000			
Start Up Voltage (Vdc)	200			
MPPT Voltage Range (Vdc)	200~850			
MPPT Full Load Voltage Range (Vdc)	280~850			
Number of MPPT	3			
Number of PV Strings Per MPPT	1			
Maximum Current (A)	20			
Short Circuit Current Per MPPT (A)	30			
Surge Protection	Type II			
DC Parameter (Battery Side)				
Maximum Continuous Charge/Discharge Current (A)	50			
Maximum Charging Power with 2 Batteries (kW)	10			
Maximum Discharging Power with 2 Batteries (kW)	8	10	10	10
Maximum Charging Power with 3-7 Batteries (kW)	15			
Maximum Discharging Power With 3-7 Batteries (kW)	8	10	12	15
AC Parameter (Grid Side)				
Nominal Grid Voltage	3/N/PE a.c. 400 V			
Nominal Grid Frequency (Hz)	50/60			
Maximum Nominal Continuous Current to Grid (A)	11.6	14.5	17.4	21.7
Nominal Active Power to Grid (W)	8000	10000	12000	15000
Maximum Nominal Apparent Power to Grid (VA)	8000	10000	12000	15000
Maximum Nominal Continuous Current from Grid	17.4	21.7	26.1	32.6
Nominal Active Power from Grid (W)	12000	15000	18000	22500
Maximum Nominal Apparent Power from Grid (VA)	12000	15000	18000	22500
Power Factor Range	-0.8~+0.8			
THDi	＜3%			
AC Parameter (Back-up Side)				
Nominal Voltage	3/N/PE a.c. 400 V			
Nominal Output Frequency (Hz)	50/60			
Maximum Nominal Continuous Current (A)	11.6	14.5	17.4	21.7
Maximum Nominal Apparent Power (VA)	8000	10000	12000	15000
Peak Off-Grid Power (60s)/Estimate (VA)	12000	15000	18000	22500
Power Factor Range	-0.8~+0.8			
ON/Off-Grid Switching Time (ms)	≤10			
THDv	＜3%			

Efficiency	
Maximum Efficiency	98%
European Efficiency	97.5%
Protection	
Anti-Islanding protection	Yes
AFCI	2.0@IEC63027
Insulation Resistor Detection	Yes
Residual Current Monitoring Unit	Yes
Output Over Current Protection	Yes
Output Short Protection	Yes
Output Overvoltage Protection	Yes
DC Switch	Yes
DC Reverse Polarity Protection	Yes
DC/AC Surge Protection	Type II
PV Overvoltage Protection	Yes
General Data	
Dimensions (W/H/D, mm)	540*705/875/1045/1215/1385/1555*350
Weight (kg)	86/125/164/203/242/281
Topology	Transformerless
Operating Temperature Range (°C)*	-10~55
System Working Humidity Range	0~100%
System Working Altitude (m)*	＜4000
Common Noise Level (1 meter) (dB)	＜29
Maximum Parallel	6
Protective Class	I
Overvoltage Category	DC II /AC III
Ingress Protection	IP65
System Salt Spray Level	C5-M
Cooling	Natural Cooling
Standby Consumption (Night)	＜15W
Communication Portal	WIFI/WLAN/Bluetooth
Display	LED
EPO	Installed
Standard Compliance	
UN38.3/IEC61000-6/VDE-AR-E-2510-50 2017-05/IEC62619: 2022/IEC60730-1/ISO13849/IEC62477-1: 2022 EN 62477-1: 2012+A12: 2021/IEC62109-1: 2010/IEC62109-2: 2011	
VDE-AR-N-4105: 2018/DIN VDE V 0124-100: 2020/EN50549-10/EN50549-1/PPDS Annex: 2022+EN50549-10/C10/11+EN50549-10/EIFS+EN50549-10/ CEI0-21/RD1699 RD661 RD413/UNE 217002:2020/NTS Version 2.1: 2021/UNE 217001: 2021/AS 4777. 2/AS60947. 3/G98/G99/TOR/ PTPiREE/NA-EEA-NE7-CH 2020/	

* When the ambient temperature exceeds 45°C, the PCS will reduce the power
* When the altitude exceeds 2000m, the PCS will degrade the power