



# PYLONTECH SOLAR BATTERY SYSTEM

## 20 kWh Battery & Single-Phase 5 kW Inverter



### On-Demand Versatility

Flexible power support designed to adapt to different household needs, usage patterns, and energy goals.



### Trustworthy Safety Design

Engineered with reliable protection features to support safe, stable, and confident everyday energy use.



### Intelligent Solutions

Smart energy management that helps optimise power use, improve efficiency, and make home energy easier to control.



### One-Stop Solution & Effortless Installation

A complete battery solution with streamlined setup, making the switch to smarter energy simple from start to finish.



### Extraordinary Performance

Delivers dependable power, strong output, and long-lasting efficiency when your home needs it most.

# Technical Datasheet

## Model

FH3X5K-HY-1P  
5/10/15/20

### Main System Data

Battery Module	FH10050
Number of Battery Modules	4
System Nominal Capacity (kWh)	15.36/20.48
System Nominal Power (kW)	5

### DC Parameter (PV Side)

Maximum Power (kW)	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
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 of the Single-Phase Module with One Battery (kW)	2.5
Maximum Discharging Power with One Battery (kW)	2.5
Maximum Charging Power with More Than One Battery (kW)	8
Maximum Discharging Power with More Than One Battery(kW) 3.6	5

### 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)	21.7
Nominal Active Power to Grid (W)	5000
Maximum Nominal Apparent Power to Grid (VA)	5000
Maximum Nominal Continuous Current from Grid 23.5	32.6
Nominal Active Power from Grid (W) 5400	7500
Maximum Nominal Apparent Power from Grid (VA) 5400	7500
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
Maximum Nominal Apparent Power (VA) 3600	5000
Peak Off-Grid Power (60s)/Estimate (VA) 4320	6000
Power Factor Range	-0.8~+0.8
ON/Off-Grid Switching Time (ms)	≤10
THDv	< 3%

# Technical Datasheet

## 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 II
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/  
CE10-21/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

