

# Residential BESS

**-Force L Series**

**-Force H series**

---



## **Safety and Reliability**

Ensured by own designed and manufactured cell, modules and BMS



## **Optimal Electricity Cost**

Long cycle life and superior performance



## **Strong Scalability**

Maximum capacity of 215.04 kWh with 6 groups in parallel



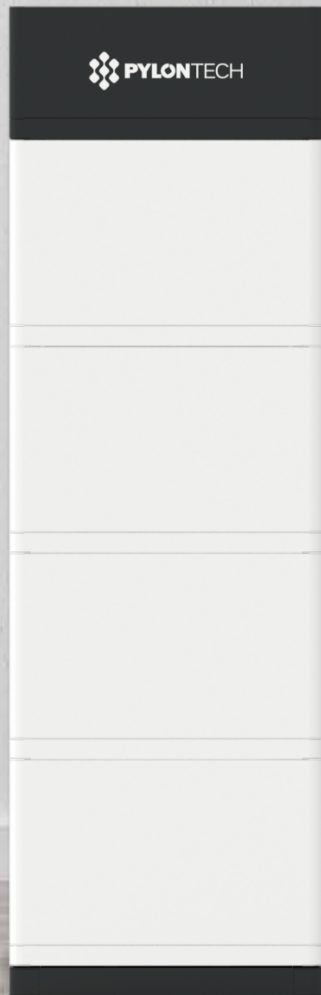
## **Flexible Mounting**

Plug&Play, no additional wiring connection



## **Compatibility**

Compatible with Top inverter brands



## SPECIFICATION (Force H3/204.8~716.8 V)



Basic Parameters						
Battery Module	FH10050					
Battery Module Voltage(Vdc)	102.4					
Battery Module Capacity(Ah)	50					
Battery Module Qty. (Optional)	2	3	4	5	6	7
Battery System Voltage (V)	204.8	307.2	409.6	512	614.4	716.8
Battery System Capacity(Ah)	50					
Battery System Capacity(kWh)	10.2	15.4	20.5	25.6	30.7	35.8
Dimension (W*D*H mm)	540*350*530	540*350*700	540*350*870	540*350*1040	540*350*1210	540*350*1380
Weight(kg)	92	131	170	209	248	287
Depth of Discharge	95%					
Charge/ Discharge Current(A)	(Recommend )		50			
	(Max.)		52			
Multi-group	Max. 6 systems in parallel					
Communication	CANBUS/Modbus RTU					
IP rating	IP55					
Working Temperature/ C	-10~50					
Shelf Temperature/ C	-20~60					
Humidity	5%~95%(w/o condensing)					
Altitude	<4000					
Design Life	15+ Years (25 C/77 F)					
Cycle Life	>8,000, 25 C					
Certification	UL9540A/UL 1973/IEC62619/IEC63056/IEC62040-1/VDE-AR-E 2510-50/IEC62477-1/UN38.3					



# Next Level Residential Energy Solution Force H3X

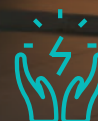
Hybrid Solution



**On-Demand  
Versatility**



**One-Stop Solution &  
Effortless Installation**



**Trustworthy Safety  
Design**



**Extraordinary  
Performance**



**Intelligent  
Solutions**

# From Heart to Your Home

## On-Demand Versatility

Single Phase/ Three Phase

Wide power range    Single group    Max. 6 groups

**3.6** kW to **15** kW    **10-35** kWh    **210** kWh

Suitable for both residential and small-scale C&I



## One-Stop Solution & Effortless Installation

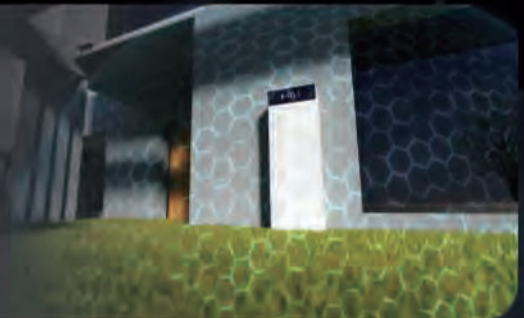
**BMS+Inverter+EMS** Highly intergrated

**15** min Installation & commissioning  
Automatic paralleling, easy set-up



## Trustworthy Safety Desgin

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

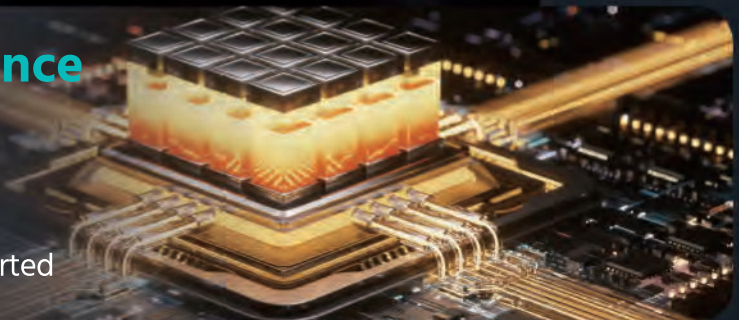


## Extraordinary Performance

**1C**    **97%**    **8000+**

Rate    Efficiency    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



# Force H3X Hybrid

HY-1P-EU

## Single Phase

### Module

FH3X3.6K-HY-1P  
EU-5/10/15/20

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

FH3X6K-HY-1P  
EU-5/10/15/20

FH3X8K-HY-1P  
EU-5/10/15/20

#### Main System Data

Battery Module	FH10050			
Number of Battery Modules	1/2/3/4			
Maximum PV Power (kW)	9.6	9.6	9.6	9.6
System Rated Capacity (kWh)	5.12/10.24/15.36/20.48			
Nominal Power (kW)	3.6	5	6	8
IP Rate	IP55			

#### Inverter Data

Maximum Power (kW)	9.6	9.6	9.6	12.8
Maximum DC Input Voltage (Vdc)	600			
Start Up Voltage (Vdc)	80			
Number of MPPT	2	2	2	3
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	80~550			
MPPT Full Load Voltage Range (Vdc)	190~520			
Maximum Current (A)	16			
Short Circuit Current Per MPPT (A)	25			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	230@50/60Hz			
Grid Voltage Range (Vac)	172.5~264.5			
On-Grid Grid Connection	L/N/PE			
Nominal AC Power (kW)	3.6	5	6	8
Maximum Grid Input Power (kW)	5.7	7.5	9.6	12
Rated Output Voltage (Vac)	230±1%			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	3.6	5	6	8
Peak Off-Grid Power (60s)/Estimate (kVA)	4.32	6	7.2	9.6
Maximum Parallel	6			
Efficiency Maximum Efficiency	(400V PV) 97%			
European Efficiency	97%			

#### General Data

System Battery Voltage (Vdc)	100~500			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(565/735/905/1075)			
System Weight (kg)	69/108/147/186			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

#### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/Standard (A)	10			
Discharge/Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Multi-Group	Max.6 Systems in Parallel			

#### 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/T1+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

# Force H3X Hybrid

Three Phase

HY-3P-EU

## Module

FH3X8K-HY-3P EU-10/15/20/25/30/35    FH3X10K-HY-3P EU-10/15/20/25/30/35    FH3X12K-HY-3P EU-10/15/20/25/30/35    FH3X15K-HY-3P EU-10/15/20/25/30/35

### Main System Data

Battery Module	FH10050			
Number of Battery Modules	2/3/4/5/6/7			
Maximum PV Power (kW)	24			
System Rated Capacity (kWh)	10.24/15.36/20.48/25.6/30.72/35.84			
Nominal Power (kW)	8	10	12	15
IP Rate	IP55			

### Inverter Data

Maximum Power (kW)	24			
Maximum DC Input Voltage (Vdc)	1000			
Start Up Voltage (Vdc)	200			
Number of MPPT	3			
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	200~850			
MPPT Full Load Voltage Range (Vdc)	280~850			
Maximum Current (A)	20			
Short Circuit Current Per MPPT (A)	30			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	400@50/60Hz			
Grid Voltage Range (Vac)	320~480			
On-Grid Grid Connection	3W/N/PE			
Nominal AC Power (kW)	8	10	12	15
Maximum Grid Input Power (kW)	12	15	18	22.5
Rated Output Voltage (Vac)	400			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	8	10	12	15
Peak Off-Grid Power (60s)/Estimate (kVA)	9.6	12	14.4	18
Maximum Parallel	6			
Efficiency Maximum Efficiency	(600V PV) 97%			
European Efficiency	97%			

### General Data

System Battery Voltage (Vdc)	120~850			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(780/950/1120/1290/1460/1630)			
System Weight (kg)	118/157/196/235/274/313			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/ Standard (A)	10			
Discharge Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Muti-Group	Max.6 Systems in Parallel			

### 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/CEIO-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/



# Next Level Residential Energy Solution Force H3X

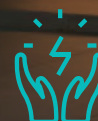
Hybrid Solution



**On-Demand  
Versatility**



**One-Stop Solution &  
Effortless Installation**



**Trustworthy Safety  
Design**



**Extraordinary  
Performance**



**Intelligent  
Solutions**

# From Heart to Your Home

## On-Demand Versatility

Single Phase/ Three Phase

Wide power range    Single group    Max. 6 groups

**3.6** kW to **15** kW    **10-35** kWh    **210** kWh

Suitable for both residential and small-scale C&I



## One-Stop Solution & Effortless Installation

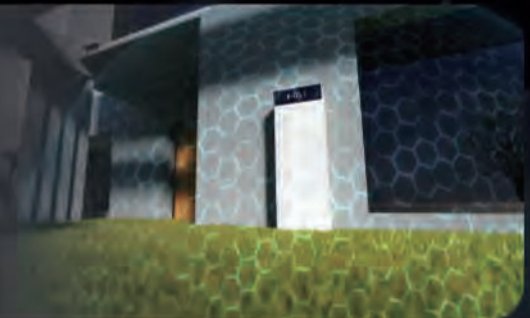
**BMS+Inverter+EMS** Highly intergrated

**15** min Installation & commissioning  
Automatic paralleling, easy set-up



## Trustworthy Safety Desgin

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

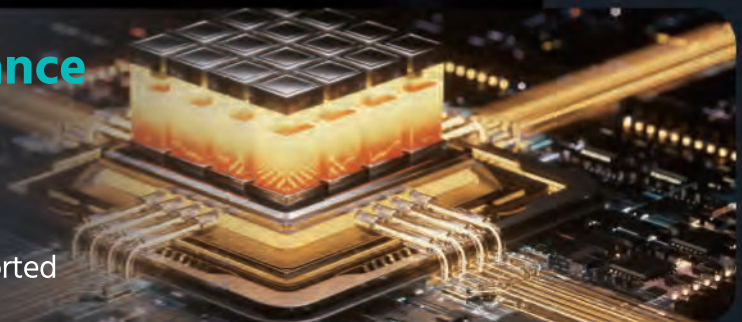


## Extraordinary Performance

**1C**    **97%**    **8000+**

Rate    Efficiency    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



# Force H3X Hybrid

HY-1P-EU

## Single Phase

### Module

FH3X3.6K-HY-1P  
EU-5/10/15/20

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

FH3X6K-HY-1P  
EU-5/10/15/20

FH3X8K-HY-1P  
EU-5/10/15/20

#### Main System Data

Battery Module	FH10050			
Number of Battery Modules	1/2/3/4			
Maximum PV Power (kW)	9.6	9.6	9.6	9.6
System Rated Capacity (kWh)	5.12/10.24/15.36/20.48			
Nominal Power (kW)	3.6	5	6	8
IP Rate	IP55			

#### Inverter Data

Maximum Power (kW)	9.6	9.6	9.6	12.8
Maximum DC Input Voltage (Vdc)	600			
Start Up Voltage (Vdc)	80			
Number of MPPT	2	2	2	3
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	80~550			
MPPT Full Load Voltage Range (Vdc)	190~520			
Maximum Current (A)	16			
Short Circuit Current Per MPPT (A)	25			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	230@50/60Hz			
Grid Voltage Range (Vac)	172.5~264.5			
On-Grid Grid Connection	L/N/PE			
Nominal AC Power (kW)	3.6	5	6	8
Maximum Grid Input Power (kW)	5.7	7.5	9.6	12
Rated Output Voltage (Vac)	230±1%			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	3.6	5	6	8
Peak Off-Grid Power (60s)/Estimate (kVA)	4.32	6	7.2	9.6
Maximum Parallel	6			
Efficiency Maximum Efficiency	(400V PV) 97%			
European Efficiency	97%			

#### General Data

System Battery Voltage (Vdc)	100~500			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(565/735/905/1075)			
System Weight (kg)	69/108/147/186			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

#### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/Standard (A)	10			
Discharge/Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Multi-Group	Max.6 Systems in Parallel			

#### 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/T1+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

# Force H3X Hybrid

Three Phase

HY-3P-EU

## Module

FH3X8K-HY-3P EU-10/15/20/25/30/35    FH3X10K-HY-3P EU-10/15/20/25/30/35    FH3X12K-HY-3P EU-10/15/20/25/30/35    FH3X15K-HY-3P EU-10/15/20/25/30/35

### Main System Data

Battery Module	FH10050			
Number of Battery Modules	2/3/4/5/6/7			
Maximum PV Power (kW)	24			
System Rated Capacity (kWh)	10.24/15.36/20.48/25.6/30.72/35.84			
Nominal Power (kW)	8	10	12	15
IP Rate	IP55			

### Inverter Data

Maximum Power (kW)	24			
Maximum DC Input Voltage (Vdc)	1000			
Start Up Voltage (Vdc)	200			
Number of MPPT	3			
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	200~850			
MPPT Full Load Voltage Range (Vdc)	280~850			
Maximum Current (A)	20			
Short Circuit Current Per MPPT (A)	30			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	400@50/60Hz			
Grid Voltage Range (Vac)	320~480			
On-Grid Grid Connection	3W/N/PE			
Nominal AC Power (kW)	8	10	12	15
Maximum Grid Input Power (kW)	12	15	18	22.5
Rated Output Voltage (Vac)	400			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	8	10	12	15
Peak Off-Grid Power (60s)/Estimate (kVA)	9.6	12	14.4	18
Maximum Parallel	6			
Efficiency Maximum Efficiency	(600V PV) 97%			
European Efficiency	97%			

### General Data

System Battery Voltage (Vdc)	120~850			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(780/950/1120/1290/1460/1630)			
System Weight (kg)	118/157/196/235/274/313			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/ Standard (A)	10			
Discharge Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Muti-Group	Max.6 Systems in Parallel			

### 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/CEIO-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/

# Residential BESS

**-Force L Series**

**-Force H series**

---



## **Safety and Reliability**

Ensured by own designed and manufactured cell, modules and BMS



## **Optimal Electricity Cost**

Long cycle life and superior performance



## **Strong Scalability**

Maximum capacity of 215.04 kWh with 6 groups in parallel



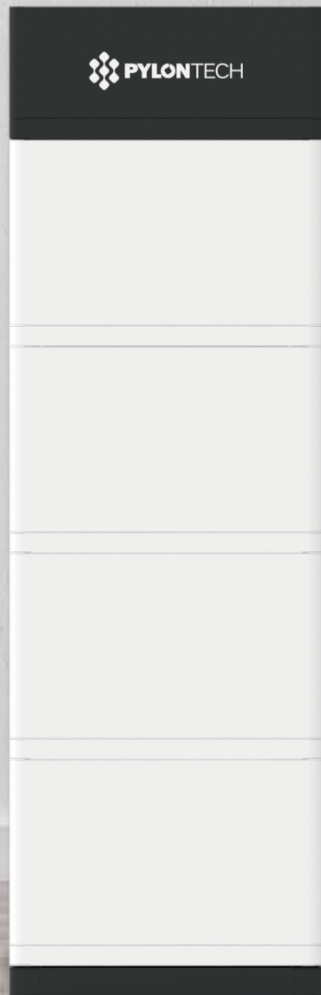
## **Flexible Mounting**

Plug&Play, no additional wiring connection



## **Compatibility**

Compatible with Top inverter brands



## SPECIFICATION (Force H3/204.8~716.8 V)



Basic Parameters						
Battery Module	FH10050					
Battery Module Voltage(Vdc)	102.4					
Battery Module Capacity(Ah)	50					
Battery Module Qty. (Optional)	2	3	4	5	6	7
Battery System Voltage (V)	204.8	307.2	409.6	512	614.4	716.8
Battery System Capacity(Ah)	50					
Battery System Capacity(kWh)	10.2	15.4	20.5	25.6	30.7	35.8
Dimension (W*D*H mm)	540*350*530	540*350*700	540*350*870	540*350*1040	540*350*1210	540*350*1380
Weight(kg)	92	131	170	209	248	287
Depth of Discharge	95%					
Charge/ Discharge Current(A)	(Recommend )		50			
	(Max.)		52			
Multi-group	Max. 6 systems in parallel					
Communication	CANBUS/Modbus RTU					
IP rating	IP55					
Working Temperature/ C	-10~50					
Shelf Temperature/ C	-20~60					
Humidity	5%~95%(w/o condensing)					
Altitude	<4000					
Design Life	15+ Years (25 C/77 F)					
Cycle Life	>8,000, 25 C					
Certification	UL9540A/UL 1973/IEC62619/IEC63056/IEC62040-1/VDE-AR-E 2510-50/IEC62477-1/UN38.3					



# Next Level Residential Energy Solution Force H3X

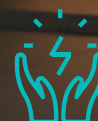
Hybrid Solution



**On-Demand  
Versatility**



**One-Stop Solution &  
Effortless Installation**



**Trustworthy Safety  
Design**



**Extraordinary  
Performance**



**Intelligent  
Solutions**

# From Heart to Your Home

## On-Demand Versatility

Single Phase/ Three Phase

Wide power range    Single group    Max. 6 groups

**3.6** kW to **15** kW    **10-35** kWh    **210** kWh

Suitable for both residential and small-scale C&I



## One-Stop Solution & Effortless Installation

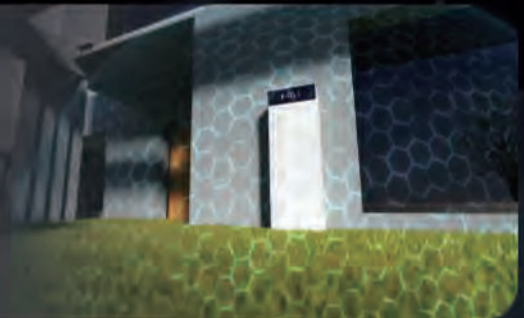
**BMS+Inverter+EMS** Highly intergrated

**15** min Installation & commissioning  
Automatic paralleling, easy set-up



## Trustworthy Safety Desgin

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

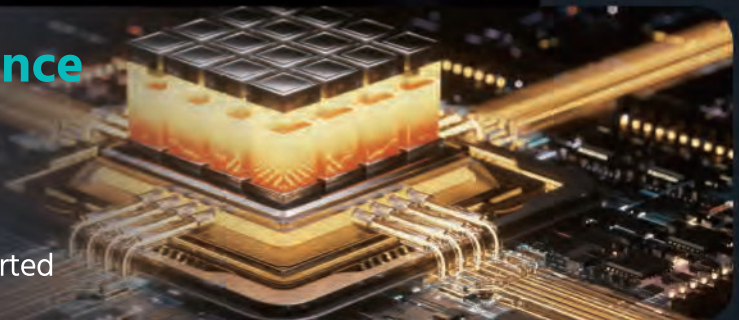


## Extraordinary Performance

**1C**    **97%**    **8000+**

Rate    Efficiency    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



# Force H3X Hybrid

HY-1P-EU

## Single Phase

### Module

FH3X3.6K-HY-1P  
EU-5/10/15/20

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

FH3X6K-HY-1P  
EU-5/10/15/20

FH3X8K-HY-1P  
EU-5/10/15/20

#### Main System Data

Battery Module	FH10050			
Number of Battery Modules	1/2/3/4			
Maximum PV Power (kW)	9.6	9.6	9.6	9.6
System Rated Capacity (kWh)	5.12/10.24/15.36/20.48			
Nominal Power (kW)	3.6	5	6	8
IP Rate	IP55			

#### Inverter Data

Maximum Power (kW)	9.6	9.6	9.6	12.8
Maximum DC Input Voltage (Vdc)	600			
Start Up Voltage (Vdc)	80			
Number of MPPT	2	2	2	3
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	80~550			
MPPT Full Load Voltage Range (Vdc)	190~520			
Maximum Current (A)	16			
Short Circuit Current Per MPPT (A)	25			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	230@50/60Hz			
Grid Voltage Range (Vac)	172.5~264.5			
On-Grid Grid Connection	L/N/PE			
Nominal AC Power (kW)	3.6	5	6	8
Maximum Grid Input Power (kW)	5.7	7.5	9.6	12
Rated Output Voltage (Vac)	230±1%			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	3.6	5	6	8
Peak Off-Grid Power (60s)/Estimate (kVA)	4.32	6	7.2	9.6
Maximum Parallel	6			
Efficiency Maximum Efficiency	(400V PV) 97%			
European Efficiency	97%			

#### General Data

System Battery Voltage (Vdc)	100~500			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(565/735/905/1075)			
System Weight (kg)	69/108/147/186			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

#### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/Standard (A)	10			
Discharge/Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Multi-Group	Max.6 Systems in Parallel			

#### 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/T1+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

# Force H3X Hybrid

Three Phase

HY-3P-EU

## Module

FH3X8K-HY-3P  
EU-10/15/20/25/30/35

FH3X10K-HY-3P  
EU-10/15/20/25/30/35

FH3X12K-HY-3P  
EU-10/15/20/25/30/35

FH3X15K-HY-3P  
EU-10/15/20/25/30/35

### Main System Data

Battery Module	FH10050			
Number of Battery Modules	2/3/4/5/6/7			
Maximum PV Power (kW)	24			
System Rated Capacity (kWh)	10.24/15.36/20.48/25.6/30.72/35.84			
Nominal Power (kW)	8	10	12	15
IP Rate	IP55			

### Inverter Data

Maximum Power (kW)	24			
Maximum DC Input Voltage (Vdc)	1000			
Start Up Voltage (Vdc)	200			
Number of MPPT	3			
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	200~850			
MPPT Full Load Voltage Range (Vdc)	280~850			
Maximum Current (A)	20			
Short Circuit Current Per MPPT (A)	30			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	400@50/60Hz			
Grid Voltage Range (Vac)	320~480			
On-Grid Grid Connection	3W/N/PE			
Nominal AC Power (kW)	8	10	12	15
Maximum Grid Input Power (kW)	12	15	18	22.5
Rated Output Voltage (Vac)	400			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	8	10	12	15
Peak Off-Grid Power (60s)/Estimate (kVA)	9.6	12	14.4	18
Maximum Parallel	6			
Efficiency Maximum Efficiency	(600V PV) 97%			
European Efficiency	97%			

### General Data

System Battery Voltage (Vdc)	120~850			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(780/950/1120/1290/1460/1630)			
System Weight (kg)	118/157/196/235/274/313			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/ Standard (A)	10			
Discharge Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Muti-Group	Max.6 Systems in Parallel			

### 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/CEIO-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/



# Next Level Residential Energy Solution Force H3X

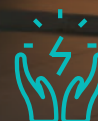
Hybrid Solution



**On-Demand  
Versatility**



**One-Stop Solution &  
Effortless Installation**



**Trustworthy Safety  
Design**



**Extraordinary  
Performance**



**Intelligent  
Solutions**

# From Heart to Your Home

## On-Demand Versatility

Single Phase/ Three Phase

Wide power range    Single group    Max. 6 groups

**3.6** kW to **15** kW    **10-35** kWh    **210** kWh

Suitable for both residential and small-scale C&I



## One-Stop Solution & Effortless Installation

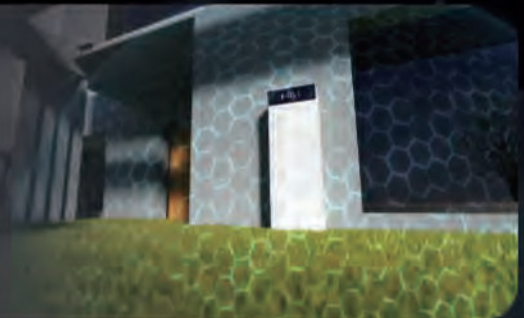
**BMS+Inverter+EMS** Highly intergrated

**15** min Installation & commissioning  
Automatic paralleling, easy set-up



## Trustworthy Safety Desgin

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

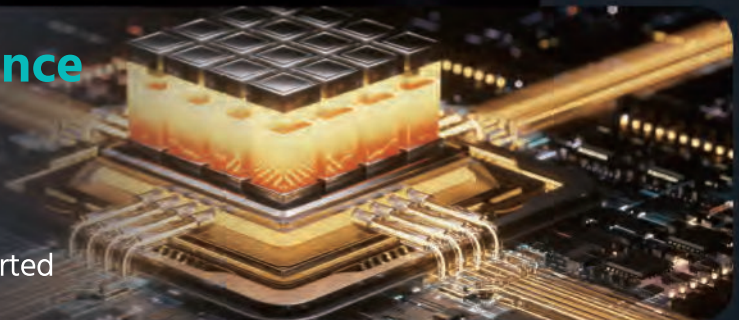


## Extraordinary Performance

**1C**    **97%**    **8000+**

Rate    Efficiency    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



# Force H3X Hybrid

HY-1P-EU

## Single Phase

### Module

FH3X3.6K-HY-1P  
EU-5/10/15/20

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

FH3X6K-HY-1P  
EU-5/10/15/20

FH3X8K-HY-1P  
EU-5/10/15/20

#### Main System Data

Battery Module	FH10050			
Number of Battery Modules	1/2/3/4			
Maximum PV Power (kW)	9.6	9.6	9.6	9.6
System Rated Capacity (kWh)	5.12/10.24/15.36/20.48			
Nominal Power (kW)	3.6	5	6	8
IP Rate	IP55			

#### Inverter Data

Maximum Power (kW)	9.6	9.6	9.6	12.8
Maximum DC Input Voltage (Vdc)	600			
Start Up Voltage (Vdc)	80			
Number of MPPT	2	2	2	3
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	80~550			
MPPT Full Load Voltage Range (Vdc)	190~520			
Maximum Current (A)	16			
Short Circuit Current Per MPPT (A)	25			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	230@50/60Hz			
Grid Voltage Range (Vac)	172.5~264.5			
On-Grid Grid Connection	L/N/PE			
Nominal AC Power (kW)	3.6	5	6	8
Maximum Grid Input Power (kW)	5.7	7.5	9.6	12
Rated Output Voltage (Vac)	230±1%			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	3.6	5	6	8
Peak Off-Grid Power (60s)/Estimate (kVA)	4.32	6	7.2	9.6
Maximum Parallel	6			
Efficiency Maximum Efficiency	(400V PV) 97%			
European Efficiency	97%			

#### General Data

System Battery Voltage (Vdc)	100~500			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(565/735/905/1075)			
System Weight (kg)	69/108/147/186			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

#### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/Standard (A)	10			
Discharge/Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Multi-Group	Max.6 Systems in Parallel			

#### 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/T1+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

# Force H3X Hybrid

Three Phase

HY-3P-EU

## Module

FH3X8K-HY-3P EU-10/15/20/25/30/35    FH3X10K-HY-3P EU-10/15/20/25/30/35    FH3X12K-HY-3P EU-10/15/20/25/30/35    FH3X15K-HY-3P EU-10/15/20/25/30/35

### Main System Data

Battery Module	FH10050			
Number of Battery Modules	2/3/4/5/6/7			
Maximum PV Power (kW)	24			
System Rated Capacity (kWh)	10.24/15.36/20.48/25.6/30.72/35.84			
Nominal Power (kW)	8	10	12	15
IP Rate	IP55			

### Inverter Data

Maximum Power (kW)	24			
Maximum DC Input Voltage (Vdc)	1000			
Start Up Voltage (Vdc)	200			
Number of MPPT	3			
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	200~850			
MPPT Full Load Voltage Range (Vdc)	280~850			
Maximum Current (A)	20			
Short Circuit Current Per MPPT (A)	30			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	400@50/60Hz			
Grid Voltage Range (Vac)	320~480			
On-Grid Grid Connection	3W/N/PE			
Nominal AC Power (kW)	8	10	12	15
Maximum Grid Input Power (kW)	12	15	18	22.5
Rated Output Voltage (Vac)	400			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	8	10	12	15
Peak Off-Grid Power (60s)/Estimate (kVA)	9.6	12	14.4	18
Maximum Parallel	6			
Efficiency Maximum Efficiency	(600V PV) 97%			
European Efficiency	97%			

### General Data

System Battery Voltage (Vdc)	120~850			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(780/950/1120/1290/1460/1630)			
System Weight (kg)	118/157/196/235/274/313			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/ Standard (A)	10			
Discharge Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Muti-Group	Max.6 Systems in Parallel			

### 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/CEIO-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/



# Next Level Residential Energy Solution Force H3X

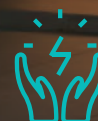
Hybrid Solution



**On-Demand  
Versatility**



**One-Stop Solution &  
Effortless Installation**



**Trustworthy Safety  
Design**



**Extraordinary  
Performance**



**Intelligent  
Solutions**

# From Heart to Your Home

## On-Demand Versatility

Single Phase/ Three Phase

Wide power range    Single group    Max. 6 groups

**3.6** kW to **15** kW    **10-35** kWh    **210** kWh

Suitable for both residential and small-scale C&I



## One-Stop Solution & Effortless Installation

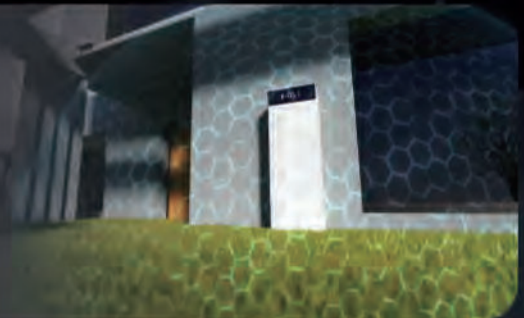
**BMS+Inverter+EMS** Highly intergrated

**15** min Installation & commissioning  
Automatic paralleling, easy set-up



## Trustworthy Safety Desgin

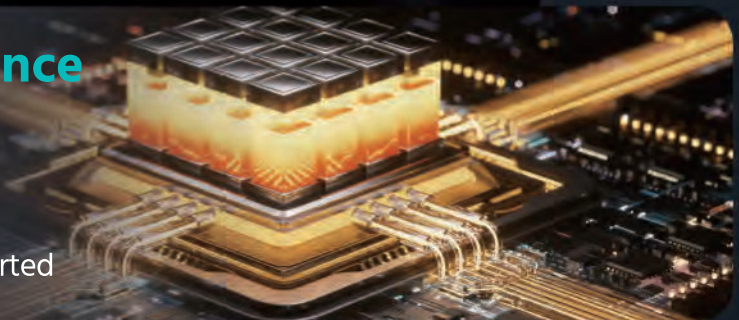
- ◆ Vertical integrated manufacturing
- ◆ Reliable product safety design
- ◆ Ai-driven smart protection
- ◆ Various safety certifications, unit level **UL9540A**



## Extraordinary Performance

**1C**    **97%**    **8000+**  
Rate    Efficiency    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



# Force H3X Hybrid

HY-1P-EU

## Single Phase

### Module

FH3X3.6K-HY-1P  
EU-5/10/15/20

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

FH3X6K-HY-1P  
EU-5/10/15/20

FH3X8K-HY-1P  
EU-5/10/15/20

#### Main System Data

Battery Module	FH10050			
Number of Battery Modules	1/2/3/4			
Maximum PV Power (kW)	9.6	9.6	9.6	9.6
System Rated Capacity (kWh)	5.12/10.24/15.36/20.48			
Nominal Power (kW)	3.6	5	6	8
IP Rate	IP55			

#### Inverter Data

Maximum Power (kW)	9.6	9.6	9.6	12.8
Maximum DC Input Voltage (Vdc)	600			
Start Up Voltage (Vdc)	80			
Number of MPPT	2	2	2	3
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	80~550			
MPPT Full Load Voltage Range (Vdc)	190~520			
Maximum Current (A)	16			
Short Circuit Current Per MPPT (A)	25			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	230@50/60Hz			
Grid Voltage Range (Vac)	172.5~264.5			
On-Grid Grid Connection	L/N/PE			
Nominal AC Power (kW)	3.6	5	6	8
Maximum Grid Input Power (kW)	5.7	7.5	9.6	12
Rated Output Voltage (Vac)	230±1%			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	3.6	5	6	8
Peak Off-Grid Power (60s)/Estimate (kVA)	4.32	6	7.2	9.6
Maximum Parallel	6			
Efficiency Maximum Efficiency	(400V PV) 97%			
European Efficiency	97%			

#### General Data

System Battery Voltage (Vdc)	100~500			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(565/735/905/1075)			
System Weight (kg)	69/108/147/186			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

#### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/ Standard (A)	10			
Discharge Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Multi-Group	Max.6 Systems in Parallel			

#### 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/T1+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

# Force H3X Hybrid

Three Phase

HY-3P-EU

## Module

FH3X8K-HY-3P  
EU-10/15/20/25/30/35

FH3X10K-HY-3P  
EU-10/15/20/25/30/35

FH3X12K-HY-3P  
EU-10/15/20/25/30/35

FH3X15K-HY-3P  
EU-10/15/20/25/30/35

### Main System Data

Battery Module	FH10050			
Number of Battery Modules	2/3/4/5/6/7			
Maximum PV Power (kW)	24			
System Rated Capacity (kWh)	10.24/15.36/20.48/25.6/30.72/35.84			
Nominal Power (kW)	8	10	12	15
IP Rate	IP55			

### Inverter Data

Maximum Power (kW)	24			
Maximum DC Input Voltage (Vdc)	1000			
Start Up Voltage (Vdc)	200			
Number of MPPT	3			
DC Input Number of PV Strings Per MPPT	1			
(From PV) MPPT Voltage Range (Vdc)	200~850			
MPPT Full Load Voltage Range (Vdc)	280~850			
Maximum Current (A)	20			
Short Circuit Current Per MPPT (A)	30			
Surge Protection	Type II			
Nominal AC Voltage/Frequency (Vac)	400@50/60Hz			
Grid Voltage Range (Vac)	320~480			
On-Grid Grid Connection	3W/N/PE			
Nominal AC Power (kW)	8	10	12	15
Maximum Grid Input Power (kW)	12	15	18	22.5
Rated Output Voltage (Vac)	400			
ON/Off-Grid Switching Time (ms)	≤10			
Off-Grid Rated Off-Grid Power (kVA)	8	10	12	15
Peak Off-Grid Power (60s)/Estimate (kVA)	9.6	12	14.4	18
Maximum Parallel	6			
Efficiency Maximum Efficiency	(600V PV) 97%			
European Efficiency	97%			

### General Data

System Battery Voltage (Vdc)	120~850			
Maximum Charge and Discharge Current (A)	40	50	50	50
System Dimensions (Width*Depth*Height, mm)	540*350*(780/950/1120/1290/1460/1630)			
System Weight (kg)	118/157/196/235/274/313			
System Installation Method	Floor Installation (Wall-Mounted Optional for 5/10/15 Series)			
System Operating Temperature Range (°C)	-10~55			
System Working Humidity Range	0~95%			
System Salt Spray Level	C5M			
System Working Altitude (m)	≤3000			
Common Noise Level (@ 1 meter *In Nominal Condition, dB)	<29			
Cooling	Air Cooling			
Communication Portal	WIFI/WLAN/Bluetooth			
EPO	Installed			
AFCI	2.0@IEC 63027			

### Battery Data

Battery Module	FH10050			
Battery Module Capacity (kWh)	5.12			
Depth of Discharge	95%			
Charge/ Standard (A)	10			
Discharge Normal (A)	50			
MAX (A)	55@15min			
Cycle Life (@25°C)	>8000			
Muti-Group	Max.6 Systems in Parallel			

### 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/CEIO-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/



# Fidus Battery



## Extraordinary Performance

Continuous 1C Rate  
Peak Rate 2C@15S  
97% DOD



## Resilient in Harsh Conditions

Various Outdoor Scenarios Available  
Top Anti-Corrosion Level  
Cell Level Heating for Extreme Cold



## Flexible and Compatible

Strong Scalability from 5kWh~600kWh (1-120 Modules)  
50+ Popular Inverter Brands Compatible  
Wall/ Ground/ Rack Mounted Applicable

ACROSS THE BOUNDARIES  
POWER TO INFINITE



## Module

### Fidus-Battery-EU

Nominal Voltage (VDC)	51.2V
Battery Module Capacity (kWh)	5.12
Usable Capacity (kWh)	4.86
Dimension (W*D*H mm)	630*165*360
Weight (kg)	45
Depth of Discharge	95%
Charge/Discharge (A)	(Normal) 100 (Max) 100 (Peak) 121~200@15s
Communication port	RS485/CAN
IP rating	IP65
Anti-corrosion	C5-M
Multi-Group	6
Single String Quantity (pcs)	20*
Working Temperature (°C) Charge	-10~55*
Working Temperature (°C) Discharge	-10~55 (Normal Version) / -20~55 (Nordic Version)
Storage Temperature (°C)	-20~60
Humidity (RH)	5%~95% No condensation
Short current/duration time (A)	<1000/ms
Altitude (m)	≤4000
Design life @25°C	10years
Cycle life @25°C	>6,000
Certification	IEC62619/UN38.3/RoHS/Reach/WEEE/EMC/CE/IEC63056/VDE2510-50/IEC62477-1

\*19 pcs for multiple strings installation

\*Degradation at temperatures above 50°C, or below 0°C

# US Series

 Flexible for Mixed Usage

 Free to Scale Up

 19inch Rack Compatible

 High Power Efficiency



Module	US2000C	US3000C	US5000	
Nominal Voltage (VDC)	48	48	48	
Nominal Capacity (kWh)	2.4	3.55	4.8	
Usable Capacity (kWh)	2.28	3.37	4.56	
Dimension (W*D*H mm)	442*410*89	442*410*132	442*420*161	
Weight (kg)	22.5	32	39.7	
Depth of Discharge	95%	95%	95%	
Charge/ Discharge (A)	(Normal)	25	100	
	(Max)	50-89 @60s	74-89 @60s	101-120 @15min
	(Peak)	90-200 @15s	90-200 @15s	121-200 @15s
Communication Port		RS485/CAN		
Single String Quantity (pcs)	16	16	16	
Working Temperature/ (°C) Charge		0~55		
Working Temperature/ (°C) Discharge		-10~55		
Storage Temperature/ (°C)		-20~45		
Short current/duration time (A)	<4000/2ms	<4000/2ms	<2000/1ms	
IP rating		IP20		
Humidity (RH)		5%-95% No Condensation		
Altitude (m)		<4000		
Design life (@25°C)	15+ Years	15+ Years	15+ Years	
Cycle Life (@25°C)	>8,000	>8,000	>8,000	
Certification	UL1642/IEC62619/ IEC63056/ IEC61000-6-2/3 UN38.3	UL1973/UL1642/ UL9540A/VDE2510-50/ IEC63056/IEC62619/ IEC62040/IEC62477-1/ IEC61000-6-2/3/UN38.3	UL1973/UL9540A IEC62619/IEC63056/ IEC61000-6-2/3/ UN38.3	

# US Series

 Flexible for Mixed Usage

 Free to Scale Up

 19inch Rack Compatible

 High Power Efficiency



Module	US2000C	US3000C	US5000
Nominal Voltage (VDC)	48	48	48
Nominal Capacity (kWh)	2.4	3.55	4.8
Usable Capacity (kWh)	2.28	3.37	4.56
Dimension (W*D*H mm)	442*410*89	442*410*132	442*420*161
Weight (kg)	22.5	32	39.7
Depth of Discharge	95%	95%	95%
Charge/ Discharge (A)	(Normal)	25	37
	(Max)	50-89 @60s	74-89 @60s
	(Peak)	90-200 @15s	90-200 @15s
Communication Port		RS485/CAN	
Single String Quantity (pcs)	16	16	16
Working Temperature/ (°C) Charge		0~55	
Working Temperature/ (°C) Discharge		-10~55	
Storage Temperature/ (°C)		-20~45	
Short current/duration time (A)	<4000/2ms	<4000/2ms	<2000/1ms
IP rating		IP20	
Humidity (RH)		5%-95% No Condensation	
Altitude (m)		<4000	
Design life (@25°C)	15+ Years	15+ Years	15+ Years
Cycle Life (@25°C)	>8,000	>8,000	>8,000
Certification	UL1642/IEC62619/ IEC63056/ IEC61000-6-2/3 UN38.3	UL1973/UL1642/ UL9540A/VDE2510-50/ IEC63056/IEC62619/ IEC62040/IEC62477-1/ IEC61000-6-2/3/UN38.3	UL1973/UL9540A IEC62619/IEC63056/ IEC61000-6-2/3/ UN38.3

# PELIO



## Smaller Footprint

higher energy density benefit from latest LFP technology



## Expandable

Modular design  
Maximum 20\*5.12kwh



## High Power Efficiency

Continuous power 5.12kw  
Peak power 6.14kw@15min  
Peak power 10.24kw@15sec



## Monitor 24/7

Real-time monitoring of battery charging and discharging, online system updates and maintenance



# SPECIFICATION (Pelio-L-5.12)

Basic Parameters	Pelio-L-5.12
Nominal Voltage (V)	51.2
Nominal Capacity (Wh)	5120
Usable Capacity (Wh)	4864
Dimension (mm)	395*578*165
Weight (Kg)	45
Discharge Voltage (V)	44.8 ~ 56.8
Charge Voltage (V)	56.0 ~ 56.8
Recommend Charge/Discharge Current (A)	80
Max. Charge/Discharge Current (A)	100~120@15min
Peak Charge/Discharge Current (A)	120~200@15sec
Communication Port	RS485, CAN
Operation&Connection	WIFI*(2.4G), USB 2.0
Depth of discharge (%)	95
Configuration (max. in 1 battery group)	20pcs
Working Temperature	0℃~50℃ Charge -10℃~50℃ Discharge
Shelf Temperature	0℃~40℃ (6 months) -20℃~45℃ (3 months)
Short current/duration time	<4000A/2ms
Cooling type	Natural
Protective class	I
IP rating of enclosure	IP65
Humidity	5% ~ 95%(RH) No Condensation
Altitude(m)	<4000
Design life	15+ Years (25℃/77℉)
Cycle Life	>8,000 25℃
Reference to standards	IEC62619, IEC63056, IEC62040, IEC62477-1, UL1973, U1642, UL9540A, VDE2510-50, IEC61000-6-2, IEC61000-6-3, UN38.3