stromherz

High Voltage Three Phase All-In-One ESS

• 6.0KW • 8.0KW • 10.0KW • 12.0KW

Features

- Integrated smart EMS support various power applications
- <10ms UPS level emergency grid power back-up
- Up to 20kVA peak off-grid loading capability for 60 seconds
- Asymmetric output for both on/off-grid loading under zero injection
- Both On & Off-grid ports can be paralleled to support bigger loading(Q2-2021)

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Plug in and Play

Wall mouted or stackable, easily installation

Standard Runnig Modes

- Maximum Solar Self-consumption
- Emergency Power Back-up (UPS Level)
- Parallel Connection
- Zero-injection
- Peak Valley Mode
- Peak Load Shifting, one key to optimize grid connection capability
- Smart Micro Grid Solution (Off-grid)

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Three Phase Connection with Asymmetric Output

Battery High Voltage Max. 750V

Always on UPS <10ms

Zero Grid Injection Function

LiFePO4, Superior Safety

Modular Design

Master BMS

Operation Voltage [Vdc]	200~900
Max. Charge/Discharge Current [A]	30
Recommend Charge/Discharge Current [A]	30
Functions	Pre-charge, Over-Less Voltage/
	/Over-Less Temperature Protection,
	Cells Balancing/SOC-SOH calculationetc.
Communication Protocol/Connector Type	CAN/RS485 ModBus, TCP/IP/ RJ45
Power Connection Type	Amphenol MC4
User Interface	LCD Display(Optional, need to be confirmed upon order)
Dimension [W*H*D mm]	557*319*152.6
Weight	11kg
Operating Temperature [℃]	-20~55
Ingress Protection	IP21(Optional IP65, need to be confirmed upon order)
Installation Method	Floor or Wall Mounted
Warranty	10 years

Battery Module

Nominal Voltage/Capacity per Module	76.8V/2.3KWH
Expand Capability	Up to 8 Modules series at 614V/18.4KWH
DOD Recommended	90%
Max. Charge/Discharge Current [A]	30A Continual
Recommend Charge/Discharge Current [A]	25A Continual
Communication Protocol/Connector Type	CAN/ RJ45
Power Connection Type	Amphenol MC4
Dimension [W*H*D mm]	557*319*152.6 per module
Weight	28kg
Charge Temperature Range [℃]	0~45
Discharge Temperature Range [℃]	-20~55
Ingress Protection	IP21(Optional IP65, need be confirmed upon order)
Installation Method	Floor or Wall Mounted
Cables Connection Method	Connection from side
Warranty	10 years or 10,000 cycles @90% DOD

*Battery System Configuration Options: 230V/6.9kWh, 307V/9.2kWh, 384V/11.5kWh, 460V/13.8kWh, 537V/16.1kWh, 614V/18.4kWh

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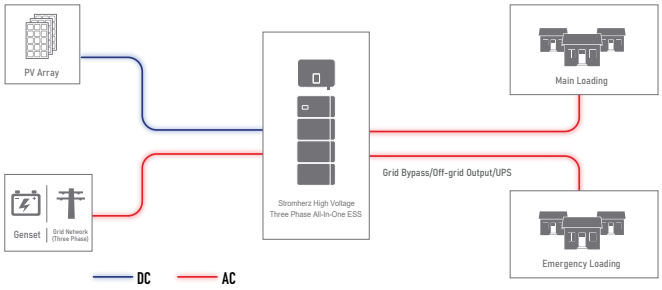

Inverter

PV INPUT(DC)	6.0KW	8.0KW	10.0KW	12.0KW
Max. DC Input Power [W]	7,800	10,400	13,000	15,600
Start-up PV Voltage [Vdc]	180	180	180	180
Max. Input DC Voltage [Vdc]	1,000	1,000	1,000	1100
Nominal Input DC Voltage [Vdc]	620	620	620	620
MPPT Voltage Range [Vdc]	200~850	200~850	200~850	200~850
Number of MPP Trackers	2	2	2	2
PV String per MPPT	1/1	1	1	1
Max. PV Input Current [A]	13/13	13/13	13/13	13/13
Max. Short Current [A]	18/18	18/18	18/18	18/18

INPUT& OUTPUT DC (BATTERY)	
Battery Voltage Range [Vdc]	180~750
Max. Charging/Discharging Current [A]	25/25
Inverter Built-in Over-current fuse Capacity [A]	63
Battery Ready Optional Function	YES

AC OUTPUT/INPUT @GRID				
Nominal Output Power [kW]/Max. Output Power [kW]	6/6.6	8/8.8	10/11	12/13.2
Max. Input Apparent Power [kVA]	12*	16*	16.5*	16.5*
Max. Battery Charging Power [kW]	6	8	10	12
Nominal Output Voltage [V]	3/N/PE, 230(400)			
Nominal Output Frequency [HZ]	50/60Hz 45~55Hz/55~65Hz			
Max. AC Current Output [A]	10	13.3	16.5	20
Output Power Factor	0.8 leading...0.8 lagging			
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%
DCI	<0.5%In	<0.5%In	<0.5%In	<0.5%In

AC OUTPUT @BACK UP WITH BATTERY				
Max. Output Apparent Power [kVA]	6.6	8.8	11	13.2
Peak Output Apparent Power [kVA]	12, 60sec**	16, 60sec**	20, 60sec**	20, 60sec**
Peak Apparent Output Power per Phase [kVA]	2.6***	3.3***	4***	5***
Nominal Output Voltage [V]	230(400)	230(400)	230(400)	230(400)
Automatic Switch Time [ms]	<10	<10	<10	<10
Nominal Output Frequency [HZ]	50/60	50/60	50/60	50/60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Parallel Capability	Maximum 10 inverters can be paralleled at On-grid ports, Off-grid ports parallel function to be available Q2-2021M			

Battery Options(Based on Inverter Max. 25A Charge&Discharge Capacity)						
Voltage (Vdc)	230V	307V	384V	460V	537V	614V
Capacity [kWH]	6.9kWh	9.2kWh	11.5kWh	13.8kWh	16.1kWh	18.4kWh
Max. Discharging Power [kW]	5.7kW	7.6kW	9.6kW	11.5kW	12kW	12kW

EFFICIENCY	
PV Max. Efficiency	98.6%
PV Europe Efficiency	97.5%
PV Max. MPPT Efficiency	99.9%
Max. Battery to load Efficiency	98.2%

PROTECTION	
PV Input Reverse Polarity Protection	YES
Battery Input Reverse Polarity Protection	YES
Anti-Islanding Protection	YES
Insulation Resistance Detection	YES
Residual Current Monitoring Unit	YES
Output Over Current Protection	YES
Grid Output Short Protection	YES
Output Over Voltage Protection	YES

GENERAL DATA	
Operating Temperature Range [℃]	-30~60
Relative Humidity	0~100%
Operating Altitude [m]	4000
Cooling	Fan Free
Noise [dB]	<25
User Interface	LED&APP
Communication with BMS	CAN&RS485
Communication with Meter	RS485
Communication with Portal	Wi-Fi/Ethernet
Weight [kg]	26
Size (W*H*D) [mm]	550*410*175
ounting	Wall Mounted
Protection Degree	IP65
Standby Self-Consumption [W]	<15
Topology	Transformerless

* ** Maximum power imported from grid to support back-up loading and charge battery.
*** Only upon sufficient PV and battery available power.

Peak output apparent of power per phase is the max output apparent power that won't trigger the overload protection.