

Isuna 5.3-52-HF-G3 Battery

Isuna residential storage system

- Stackable up to 5 modules
Support up to 4 clusters in parallel (Optional)
- IP65(Suitable for outdoor scenes)
- Double protection
- 1C charging/discharging



Isuna 5.3-52-HF-G3 is a high-voltage integrated lithium battery system, storing renewable energy to boost self-consumption and provide grid-outage backup. With compact, edge-free, minimalist design, it supports flexible indoor/outdoor mounting, and suits high-power scenarios with limited space, restricted load-bearing and long cycle life needs. Its built-in BMS monitors cell voltage, current and temperature, and balances charge/discharge to extend cycle life; multiple modules can be series-connected to expand capacity and power for larger, longer-duration demands.



Safety and long lifespan, high efficiency and high-power density



Battery module auto networking, automatic IP addressing, easy maintenance, free stand design and saving installation space



Support high discharge power, module level Auto-balancing.



Whole module non-toxic,pollution-free.



Intelligent BMS, providing complete protection.



Remotely monitoring and upgradable, support USB drive upgrade for the firmware.

Isuna 5.3-52-HF-G3

MODEL	Isuna 5.3-52-HF-G3-1	Isuna 5.3-52-HF-G3-2	Isuna 5.3-52-HF-G3-3	Isuna 5.3-52-HF-G3-4	Isuna 5.3-52-HF-G3-5
Schematic Drawing					
Total Energy [kWh]	5.3	10.6	15.9	21.2	26.5
Battery Module			102.4V 5.3kWh		
Number of Modules	1	2	3	4	5
Cell Type			LFP (LiFePO ₄)		
Nominal Voltage [V]	102.4	204.8	307.2	409.6	512
Operating Voltage [V]	80 - 116.8	160 - 233.6	240 - 350.4	320 - 467.2	400 - 584
Max. Charge / Discharge Current [A]	50	50	50	50	50
Continue Discharge Output [kW]	5	10	15	20	25
Dimension [W*D*H]	740 * 366 * 400mm	740 *366*620mm	740 * 366 *840mm	740 * 366*1060mm	740 * 366*1280mm
Approximate Weight [KG]	69	119	169	219	269

General Specifications

Recommend Depth of Discharge	90%
LED Indicator	4 LED (SOC: 25%-SOC:100% blue), 2 LED (working green, alarming red)
IP Rating of Enclosure	IP65
Operating Temperature	Optional: Charge/Discharge: 0°C-50°C(without heating film); Charge/Discharge: -20°C-50°C(with heating film)
Storage Temperature	0°C - 35°C
Humidity	≤ 95%
Altitude	≤ 4000m
Cycle Life	10 + years, ≥ 6000 cycles (70 % EOL,80 % DOD,25 °C)
Installation	Stack, Floor-mounted
Communication Port	CAN2.0
Certification	UN38.3, IEC62619

The current is affected by temperature and SOC.

Modules

High Voltage Battery Control Unit (BCU)

Operating Voltage	70 - 600Vdc
Max Charge / Discharge Current	50A
Ingress Protection	IP65
Operating Temperature	Optional: Charge/Discharge: 0°C-50°C(without heating film); Charge/Discharge: -20°C-50°C(with heating film)
Storage Temperature	0°C - 35°C
Dimension (W*D*H)	740*366*120mm
Approximate Weight	12KG



Battery Module

Battery Type	LiFePO ₄ (LFP)
Nominal Voltage	102.4Vdc
Nominal Capacity	52Ah
Nominal Energy	5.3kWh
Max Charge / Discharge Current	50A
Operating Temperature	Optional: Charge/Discharge: 0°C-50°C(without heating film); Charge/Discharge: -20°C-50°C(with heating film)
Storage Temperature	0°C - 35°C
Ingress Protection	IP65
Dimension (W*D*H)	740*366*220mm
Approximate Weight	50KG



Base

Dimension (W*D*H)	740*366*60mm
Approximate Weight	7KG

