

YOUR  
SMART  
ENERGY

# STORION-G2-H50-O

COMMERCIAL &  
INDUSTRIAL SERIES

## POWER

50 kW Hybrid Inverter

## CAPACITY

8.0 kWh Battery Module  
96.76 / 193.52 kWh



## KEY FEATURES

- **All in One Design**  
The cabinet contains batteries, PCS, DC/DC, STS, and EMS, but only occupies a small area.
- **Support Multi-Direction Roof**  
PV Input: 4\*MPPT with 200V ~ 850V MPPT Voltage
- **Multiple System Operation Monitoring**  
Local SCADA Monitoring & Remote Commercial and Industrial Cloud
- **Max 5 systems in on-grid parallel, 3 systems in off-grid parallel**  
Single system switching time  $\leq 20\text{ms}$ , parallel system switching time  $\leq 100\text{ms}$

# STORION-G2-H50-O



## System Functions

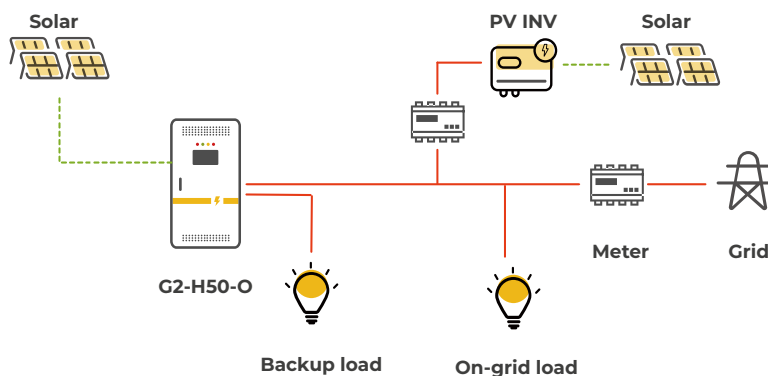
Backup

Max 5 Systems in Parallel

Peak Shaving and Load Shifting

Timed Charge and Discharge

## System Diagram



Model

STORION-G2-H50-O

## System Technical Specifications

Battery Chemistry	LiFePO4
Battery Energy Range	96.76 kWh
Depth of Discharge(DOD)	90% (On-Grid), 85% (Off-Grid)
IP Protection	IP55
Standard Battery Cluster	1*
Warranty	5 Years Product Warranty, 10 Years Battery Performance Warranty

## PV Side

Max. input power	75 kW
Start-up voltage	135 V
MPPT Voltage Range	200 ~ 850 V
Number of MPPT	4
Number of Strings for Each MPPT	2
Max. Input Current	30 A / 30 A / 30 A / 30 A
Max. Short-circuit Current	40 A / 40 A / 40 A / 40 A

## AC Data(Grid)

Rated Output Power	50 kW
Max. Input Power	60 kW
Rated Grid Voltage	3L / N / PE 220 V / 380 V; 230 V / 400 V
Grid Frequency	50 / 60 Hz
Rated Current	83 A
Output THDi	< 3%
AC PF	0,8 leading ... 0,8 lagging

## AC Data (Backup)

Rated Output Power	50 kW
Max Output Apparent Power	55 kVA
Rated Grid Voltage	3L / N / PE 220 V / 380 V; 230 V / 400 V
Grid Frequency	50 / 60 Hz
Max Current	83 A

## General Data

Dimensions(W x D x H)	( 1200+300 ) x 900 x 2160 mm
Weight	1355 kg (with 12*M38210-SC)
Operating Temperature Range	-20 °C ~ 50 °C( PCS > 45°C derating )
Relative Humidity	0 ~ 95% (No Condensation)
Max. Working Altitude	3000 m / 9842 ft ( > 3000 m derating )
Cooling Method	HVAC
Communication Interfaces	RS485, CAN, Modbus TCP, Ethernet
Display	SCADA
Certifications	IEC 62477, IEC 61000, IEC 62109, EN 50549-1, VDE 4105, G99, G100, C10/C11**, TOR Erzeuger**, NC RFG, UNE 217001/2**, CEI-021/016

\* Max support 2 battery clusters, extra battery cabinet is needed.

\*\* The certification process is ongoing.

# STORION-G2-H50-O



<b>Model</b>	<b>STORION-G2-H50-O</b>
<b>Battery Cluster System</b>	

<b>Item</b>	<b>Data</b>	
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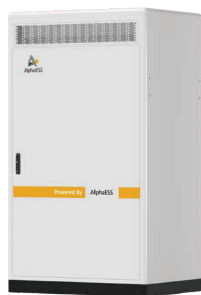
<b>Battery Module</b>	<b>M38210-SC 0.5C</b>
Battery Chemistry	LiFePO4
Pack	3.2 V / 105 Ah@2P12S
Internal Resistance	≤ 10 mΩ
Nominal Capacity	8064 kWh
Rated Voltage	38.4 V
Operating Voltage	36 V ~ 43.2 V
Max. Charging/Discharging Current	105 A
System Cycle Life	6000*
Operating Temperature Range	-10 °C ~ 50 °C**
IP Protection	IP21
Communication	CAN
Dimensions (W x D x H)	325 x 658 x 232 mm
String Pack QTY	12***
Certifications	IEC 62619, IEC 62477, IEC 61000

## Meter (Optional)



<b>Model</b>	<b>DTSU666</b>
Rated Voltage	230V AC / 400V AC
Accuracy Class	± 1%
Communication	RS485, Modbus, RTU
Dimensions (W×D×H)	72 × 80 × 101 mm
CT Model	AKH-0.66, K-30×20
CT Current Ratio	400 / 5 A
CT Perforation Size	32 × 22 mm

## Expansion Battery Cluster (Optional)



<b>Model</b>	<b>ALPBC-105-O</b>
Battery	M38210-SC
Cluster Capacity	96.76 kWh
Max. Charging / Discharging Current	105 A
Battery Cluster Voltage Range	432 V ~ 518.4 V
Battery Rack	2 x 6
Fire-Fighting System	Aerosol + Smoke / Temperature Detect
Dimensions (W×D×H)	1200 x 900 x 2160 mm
Weight	1240 kg

\* Under specific test conditions.

\*\* Max. charge/discharge current derating may occur with changes in temperature and SoC.

\*\*\* When operating with 12 or more 38210-SC batteries, the system is capable of achieving a maximum charging and discharging power of 50 kW.







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