



● YOUR  
● SMART  
● ENERGY

## STORION H30

COMMERCIAL &  
INDUSTRIAL SERIES

### POWER

30 kW

### CAPACITY

34.56 ~ 96.77 kWh



## KEY FEATURES

- **Highly Integrated**

The cabinet contains batteries, PCS, DC/DC, and EMS, but only occupies a small area.

- **Quick Installation**

Backplug battery solution greatly reduces on-site installation time and risks.

- **Hybrid Input**

PV Input: 3\*MPPT with 250V ~ 830V PV Voltage (MPPT 200 ~ 830V)

Battery Input: 150V ~ 750V (350V ~ 750V@full load), 0.25C ~ 1C Charging/Discharging

- **Multiple System Operation Monitoring**

Local SCADA Monitoring & Commercial and Industrial Cloud

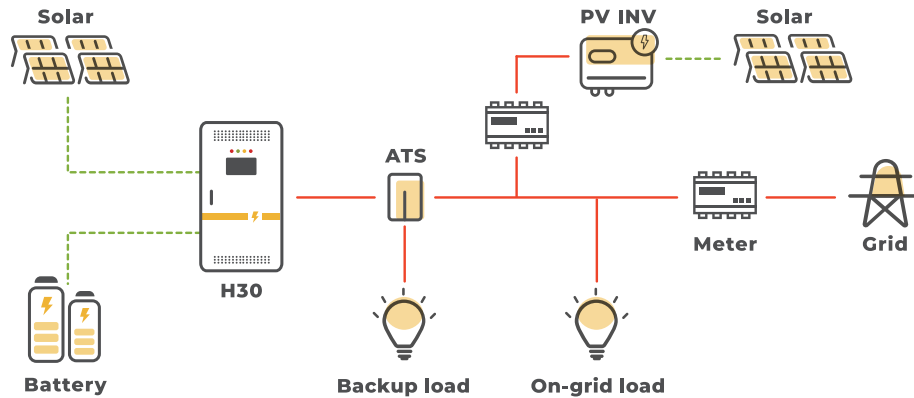
# STORION H30





## System Functions

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| <ul style="list-style-type: none"> <li>• Backup (Optional)</li> <li>• Radio Ripple Control Receiver</li> </ul> | <ul style="list-style-type: none"> <li>• Peak Shaving and Load Shifting</li> <li>• Timed Charge and Discharge</li> </ul> |
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## System Diagram



## Battery Parameters

Item	Data		
Battery Module		M7790-S 1C	M38210-SC 0.5C
Battery Type		LiFePO <sub>4</sub>	LiFePO <sub>4</sub>
Pack		3.2 V / 90 Ah@1P24S	3.2 V / 105 Ah@2P12S
Internal Resistance		≤10 mΩ	≤10 mΩ
Nominal Capacity		6.912 kWh	8.064 kWh
Rated Voltage		76.8 V	38.4 V
Operating Voltage		72 V ~ 84.48 V	36 V ~ 43.2 V
Max. Charging/Discharging Current		90 A	105 A
System Cycle Life		80% EOL with 6000@1C 25°C	80% EOL with 6000@0.5C 25°C
Communication		CAN	CAN
Dimensions (W x D x H)		326 x 654 x 250 mm	325 x 658 x 232 mm
Weight		64 kg	64 kg
String Pack QTY		5 ~ 8	8 ~ 12
Certifications		IEC62619, IEC62477, UN38.3, IEC61000	IEC62619, UN38.3, IEC61000

## PCS Parameters



30kW High Power Density  
Bi-Directional Power  
Conversion System  
DC-Coupled Solution

Item	Data
Battery Voltage Range	150 V ~ 750 V (350 V ~ 750 V@full load)*
Max. Battery Current	90 A
Rated Output Power	30 kW
Rated Grid Voltage	3L / N / PE 400VAC±15%
Grid Frequency	50 / 60 Hz
AC PF	Listed: 0.8 ~ 1 leading or lagging Actual: 0.1 ~ 1 leading or lagging
Off-Grid Voltage	3L / N / PE 400VAC±15%
Off-Grid Frequency	50 / 60 Hz
Overload Capacity	110% ~ 120%, 10min; 120% ~ 150%, 200ms
Weight	33 kg

# STORION H30



## DC/DC Parameters



High Power Density  
Bi-Directional DC-DC Converter  
Modular Design

Item	Data
Rated Power	45 kW
PV Input Voltage Range	250 V ~ 830 V
Rated Input Voltage	600 V
MPPT Voltage Range	200 V ~ 830 V
Number of MPPT	3
Max. Input Current of Each MPPT	35 A / 35 A / 35 A
Output Voltage Range	700 V ~ 830 V
Rated Output Voltage	700 V
Rated Output Current	65 A
Max. Output Current	75 A
Weight	25 kg

## ATS Parameters (Optional)



ATS Built-In Bypass

Item	Data
Max. Input Power	100 kVA (Grid & Load)
Rated Grid Voltage	3L / N / PE 400VAC±15%
Grid Frequency	50 / 60 Hz
Switching Time	30 ms (Backup)
Cooling	Forced Air-Cooling
Noise	<70dB
Dimensions (W x D x H)	440 x 205 x 920 mm
IP Protection	IP54
Weight	32 kg

Model	STORION-H30	STORION-H30-O
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## System Technical Specifications

DC Data		
Battery Type	LiFePO4	
Depth of Discharge (DoD)	90% (On-Grid), 85% (Off-Grid)	
Battery Voltage Range	150 V ~ 750 V (350 V ~ 750 V@full load)	
Battery Energy Range	34.56 kWh ~ 96.77 kWh	
Standard Battery Cluster	1	
PV Voltage Range	250 V ~ 830 V	
MPPT Voltage Range	200 V ~ 830 V	
Number of MPPT	3	
Number of Strings for Each MPPT	2	
Max. Input Current of Each MPPT	35 A	
AC Data (Grid)		
Rated Power	30 kW	
Max. Input Power	60 kW	
Rated Grid Voltage	3L / N / PE 400VAC±15%	
Grid Frequency	50 / 60Hz	
Rated Current	42 A	
Output THDi	<3%	
AC PF	Listed: 0.8 ~ 1 leading or lagging; Actual: 0.1 ~ 1 leading or lagging	
Peak Efficiency	97.30%	
AC Data (Backup)		
Rated Output Power	30 kW	
Rated Output Voltage	3L / N / PE 400VAC±20%	
Frequency	50 / 60 Hz	
Overload Capacity	110% ~ 120%, 10min; 120% ~ 150%, 200ms	
General Data		
Dimensions (L x W x H)	1100 x 900 x 2000 mm	1200 x 900 x 2160 mm
Weight of the Whole System	<1.4T (Full Battery)	<1.6T (Full Battery)
Protection Level	IP20	IP54
Operating Temperature Range	20°C ~ 30°C	- 40°C ~ 50°C
Relative Humidity	0 ~ 95% (Non-Condensing)	
Max. Working Altitude	3000 m / 9842 ft	
Warranty	5 Years Product Warranty**	
Cooling	Forced Air-Cooling	HVAC
Communication Interfaces	RS485, CAN, TCP, Ethernet	
Fire Protection	Smoke Temperature Composite Detector	Aerosol Fire Protection
Certifications	EN62109, EN62477, IEC61000, UKCA, VDE4105, Tor R25, EN0549, G99, VDE4110	

\*8 x M38210-SC Ratsd Power 27.6kW

\*\*Except for wearing parts



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