

YOUR
SMART
ENERGY



STORION T50/T100

COMMERCIAL &
INDUSTRIAL SERIES

POWER

50 kW / 100 kW

CAPACITY

34.2 ~ 387.072kWh



KEY FEATURES

UPS Ability

Off-Grid Ability

Modular Design

Easy Installation and Low Maintenance

24/7 Monitoring with Local Interface




STORION T50/T100



System Function

- Self-Sufficient
- Backup
- Remote Upgrade
- Peak Shaving and Load Shifting
- Timed Charging and Discharging

Battery

Item	Parameters			
Battery Module		M38180-S	M38210-S	M48112-S
Battery Type		LiFePO ₄	LiFePO ₄	LiFePO ₄
Pack		3.2 V / 90Ah@2P12S	3.2 V / 105Ah@2P12S	3.2 V / 56Ah@2P16S
Internal Resistance		≤10 mΩ	≤10 mΩ	≤10 mΩ
Nominal Capacity		6.912 kWh	8.064 kWh	5.734 kWh
Rated Voltage		38.4 V	38.4 V	51.2 V
Operating Voltage		36 ~ 43.2 V	36 ~ 43.2 V	48 ~ 57.6 V
Max. Charging/Discharging Current		180 A	105 A	112 A
Cycle Life		80%EOL with ≥ 6000@1C 25 °C	80%EOL with ≥ 6000@0.5C 25 °C	80%EOL with ≥ 6000@1C 25 °C
Communication		CAN	CAN	CAN
Dimensions (W x D x H)		326 x 654 x 250mm*	326 x 560 x 222mm*	450 x 580 x 165mm*
Weight		64 kg	62 kg	65 kg
String Pack QTY		8 ~ 12	8 ~ 12	6 ~ 9
Certifications		IEC62619, IEC62477, UN38.3	IEC62619, IEC62477, UN38.3	CE, UN38.3

Battery Cluster System



Configuration	HV900180, M38180-S, Rack	HV900105, M38210-S, Rack	HV900112, M48112-S, Rack
Dimensions (W x D x H)	710 x 572 x 1950 mm	743.3 x 602 x 2241.5 mm	564 x 667 x 2006 mm
Rack	2 columns, 7 layers	2 columns, 7 layers	1 column, 10 layers
Overall Weight	667 ~ 913 kg	642 ~ 890 kg	530 ~ 725 kg
Capacity of a Cluster	55.3 ~ 82.9 kWh	64.8 ~ 97.2 kWh	34.4 ~ 51.6 kWh
Max. Charging/Discharging Current	180 A	105 A	112 A
Battery Cluster Voltage Range	288 ~ 506.88 V	288 ~ 506.88 V	288 ~ 518.4 V

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Inverter



Model	PWG2-50k	PWG2-100k
PV Open Circuit Voltage	700 ~ 900 V (MPPT: 520 ~ 800 V)	700 ~ 900 V (MPPT: 520 ~ 800 V)
MPPT Number	1	1
Battery Voltage Range	250 ~ 520 V	250 ~ 520 V
Max. Charging/Discharging Current	150 A	300 A
Max. Charging/Discharging Power	50 kW	100 kW
Rated Voltage	400 V	400 V
Grid Voltage Range	340 ~ 460 V, 3L / N / PE	340 ~ 460 V, 3L / N / PE
Power Factor Range	0.99 / -1 ~ 1	0.99 / -1 ~ 1
Overload Capacity	100% ~ 110% (long-term); 110% ~ 120% (1 min); 120% ~ 150% (200 ms)	
Rated AC Current	72 A	144 A
Off-Grid Output Voltage Range	360 ~ 440 V	360 ~ 440 V
Rated Output Frequency	50 / 60 Hz	50 / 60 Hz
Backup	UPS (With STS)	UPS (With STS)
Dimensions (W x D x H)	800 x 800 x 2160 mm	800 x 800 x 2160 mm
Weight	520 kg	750 kg

DC Junction Box



TOP BMU Box	Working Voltage	24 V
	Communication	RS-485 × 4, Ethernet 10 / 100 / 1000Mbps × 1
	Internal Storage Capacity	SD Card 32G (10 years)
	Power Dissipation	< 10W
Junction Box	Max. Voltage	1000 V
	Max. Current	300 A
	Max. Number of Parallel Cluster	4
	Weight	60 kg
	Dimensions (W x D x H)	562 x 435 x 845 mm

Meter (Optional)



Model	ADL3000	
Voltage Input	Rated Voltage	AC 3 x 220 / 380 V
	Accuracy Class	± 0.2 %
Current Input	Incoming Current	1.5(6)A Access by CT
	Accuracy Class	± 0.2 %
Communication Mode	RS485, Modbus RTU	
General Parameters	Dimensions (W x D x H)	108 x 110 x 75 mm
	Connection	Flexible cable: 6 mm ²
	Humidity	≤ 95% (Non-Condensing)
CT Model	AKH-0.66, K-30 x 20	
CT Current Ratio	400 / 5	
CT Perforation Size	32 x 22 mm	

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Model	STORION-T50 (Indoor)	STORION-T50 (Container)	STORION-T100 (Indoor)	STORION-T100 (Container)
System Technical Specifications				
DC Data				
Battery Type	LiFePO ₄			
Depth of Discharge (DoD)	90% (On-Grid), 85% (Off-Grid)			
Battery Voltage Range	250 ~ 520 V			
Battery Energy Range	34.2 kWh ~ 387.072 kWh			
Standard Battery Cluster	1 ~ 4			
PV Voltage Range	700 ~ 900 V			
MPPT Voltage Range	520 ~ 800 V			
Number of MPPT	1			
AC Data-Grid				
Rated Power	50 kW		100 kW	
Max. Output Power	55 kW		110 kW	
Max. Grid Input Power	100 kW (with STS), 50 kW (without STS)		200 kW (with STS), 100 kW (without STS)	
Rated Grid Voltage	3L / N / PE, 340 ~ 460 V		3L / N / PE, 340 ~ 460 V	
Grid Frequency	50 / 60 Hz		50 / 60 Hz	
Rated Current	72 A		144 A	
AC Data-Backup				
Rated Output Power	50 kW		100 kW	
Rated Output Voltage	360 ~ 440 V		360 ~ 440 V	
Frequency	50 / 60 Hz		50 / 60 Hz	
Overload Capacity	100% ~ 110% (long-term); 110% ~ 120% (1 min); 120% ~ 150% (200ms)			
General Data				
Dimensions (L x W x H)	N/A	2991 x 2438 x 2591mm	N/A	2991 x 2438 x 2591mm
Weight of the Whole System	N/A	3960 ~ 6546 kg	N/A	4190 ~ 6776 kg
IP Protection	IP20	IP54 / C3	IP20	IP54 / C3
Operating Temperature Range	-10°C ~ 50°C**			
Relative Humidity	0 ~ 95% (Non-Condensing)			
Max. Working Altitude	3000m / 9842ft			
Quality	3 Years Product Warranty			
Cooling Method	Forced Air-Cooling / HVAC			
Communication Interfaces	RS485, CAN, Modbus, Ethernet			
Fire Protection	N/A	FM200***	N/A	FM200***
Certifications	IEC62477, EN 62109, IEC61000, VDE4105, EN50549, PEA, MEA, VDE0126, IEC62040+AS4777, NRS 097-2-1			

*Including hangers and handles.

** Max. charge/discharge current derating will occur related to temperature and SOC.

***Field inflatable in overseas market

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