

YOUR
SMART
ENERGY



STORION-TB187.5~500 (Indoor)

COMMERCIAL &
INDUSTRIAL SERIES



Self-Sufficient

Time Period Charge and Discharge

Peak Shaving and Load Shifting

Dual Power Supply

Backup

STORION-TB187.5~500 (Indoor)



System Technical Specifications

Item	STORION-TB500 (Indoor)	STORION-TB487.5 (Indoor)	STORION-TB375 (Indoor)	STORION-TB500 (Indoor)	STORION-TB487.5 (Indoor)	STORION-TB375 (Indoor)
DC Data						
Battery Type	LiFePO ₄					
Depth of Discharge (DoD)	90% (On-Grid), 85% (Off-Grid)					
Battery Voltage Range	600 ~ 900 V					
Max. Battery Energy Range	1370.88 ~ 1612.8 kWh					
Standard Battery Cluster	≤10					
AC Data - Grid						
Rated Power	500 kVA	487.5 kVA	375 kVA	312.5 kVA	250 kVA	187.5 kVA
Max. Output Power	550 kVA	536.25 kVA	412.5 kVA	343.75 kVA	275 kVA	206.25 kVA
Rated Grid Voltage	3L / N / PE, 340 ~ 460 V					
Rated Frequency	50 / 60 Hz					
Rated Current	760 A	665 A	570 A	475 A	380 A	285 A
General Data						
Ingress Protection	IP20					
Operating Temperature Range	-20°C ~ 50°C					
Relative Humidity	0 ~ 95% (No Condensation)					
Max. Working Altitude	3000m / 9842ft					
Warranty	3 Years Product Warranty					
Cooling Method	Forced Air Cooling / HVAC					
Communication Interfaces	RS485, CAN, Ethernet					
Certifications	EN 62477-1:2012+A1:2017 Low Voltage Directive 2014/35/EU, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, BS EN 62109-1:2010, IEC 61727:2004, IEC 62116:2014, EN 50549:2019+AC:2019-04, G99, IEC62109-1:2010, IEC62109-2:2011, AS/NZS 4777.2:2020					

- * Please ensure proper system wiring by following the standard topology scheme to prevent potential issues.
- **In off-grid scenarios, it is essential to maintain a reasonable capacity ratio. The PV power must be less than the lower of the rated power of the battery and the PCS, and the load power must also be less than the lower of the rated power of the battery and the PCS.



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STORION-TB187.5~500 (Indoor)




Battery


Item	Parameters	
		
Battery Module	M38180-S	M38210-S
Battery Type	LiFePO ₄	LiFePO ₄
Pack	3.2V / 90Ah@2P12S	3.2V / 105Ah@2P12S
Internal Resistance	≤10 mΩ	≤10 mΩ
Energy Capacity	6.912 kWh	8.064 kWh
Usable Capacity	6.22 kWh	7.25 kWh
Depth of Discharge (DoD)	90%	90%
Rated Voltage	38.4 V	38.4 V
Operating Voltage Range	36 ~ 43.2 V	36 ~ 43.2 V
Max. Charging / Discharging Current	180 A	105 A
Cycle Life	80%EOL with ≥ 6000@1C 25°C	80%EOL with ≥ 6000@0.5C 25°C
Operating Temperature Range	-10°C ~ 50°C	-10°C ~ 50°C
Ingress Protection	IP21	IP21
Relative Humidity	15% ~ 85%	15% ~ 85%
Warranty	3 Years Product Warranty, 10 Years Performance Warranty	
Communication	CAN	CAN
Dimensions (W×D×H)	326×654×250 mm	326×560×222 mm
Weight	64 kg	62 kg
String Pack Quantity	8 ~ 12	8 ~ 12
Certifications	IEC62619, IEC62477, UN38.3	

Item	Parameters	
		
Model	HV900180-II	HV900105-III
Rated Current	180 A	105 A
Max. Current	220 A	138 A
Rated Voltage	900 VDC	900 VDC
Ultimate Breaking Capacity	250 kA	250 kA
Auxiliary Power Supply	220 VAC	220 VAC
BCMU Power Dissipation	4 W	4 W
Dimensions (W×D×H)	91.5×440×250.1 mm	91.5×440×250.1 mm
Weight	20 kg	20 kg

Battery Cluster System

	Configuration	HV900180-II, M38180-S, Rack	HV900105-III, M38210-S, Rack
	Dimensions (W×D×H)	1049×556.3×1950 mm	1072.5×602×2241.5 mm
	Battery Racks	3×7	3×7
	Overall Weight	1233 ~ 1425 kg	1200 ~ 1386 kg
	Single Cluster Capacity	117.504 ~ 138.24 kWh	137.088 ~ 161.28 kWh
	Max. Charging / Discharging Current	180 A	105 A
	Battery Cluster Voltage Range	652.8 ~ 768 V	652.8 ~ 768 V

DC Junction Box

	TOP BMU Box	TOP BMU Power	30 W
		Communication	RS-485×6, CAN×3
		SCADA Power	18 W
	Junction Box	Max. Voltage	900 V
		Max. Current	630 A / 1250 A
		Operating Temperature Range	-30°C ~ 50°C
		Weight	145 kg
Dimensions (W×D×H)	600×600×1650 mm		

STORION-TB187.5~500 (Indoor)

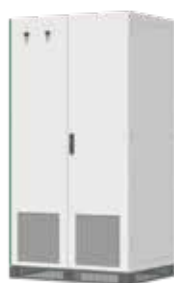


Inverter



Model	PWS1-500KTL	PWS1-437.5KTL	PWS1-375KTL	PWS1-312.5KTL	PWS1-250KTL	PWS1-187.5KTL
Battery Voltage Range	600 ~ 900 V					
Max. Charging / Discharging Current	873 A	764 A	655 A	546 A	436 A	327 A
Nominal Power	500 kW	437.5 kW	375 kW	312.5 kW	250 kW	187.5 kW
Rated Voltage	400 V					
Grid Voltage Range	340 ~ 460 V, 3L / N / PE					
Power Factor Range	0.99 / -1 ~ 1					
Overload Capacity	105%~115% (10 min); 115%~125% (1 min); 125%~150% (200ms)					
Rated AC Current	760 A	665 A	570 A	475 A	380 A	285 A
Off-Grid Output Voltage Range	360 ~ 440 V					
Rated Output Frequency	50 / 60 Hz					
Dimensions (W×D×H)	1100×800×2160 mm					

Transformer



Rated Capacity	500 kVA
Input Voltage	380 V
Output Voltage	400 V
Group of Connections	Dyn11
Insulation Class	H
No-Load Current	5%
Full Load Efficiency	≥99.17%
Ambient Temperature	-25 ~ 50°C
Weight	1580 kg
Dimensions (W×H×L)	1100×800×2160 mm

Meter (Optional)



Model	DTSU666	
Voltage Input	Rated Voltage	230V AC / 400V AC
	Accuracy Class	±1%
Communication Mode	RS485, Modbus RTU	
General Parameters	Dimensions (W×D×H)	72×101×80 mm
CT Model	AKH-0.66, K-60×40, AKH-0.66, K-100×40	
CT Current Ratio	800 / 5A, 1250 / 5A	
CT Perforation Size	60×40 mm, 100×40 mm	

STS



Rated Capacity	800 kW
Rated Voltage	400 V
Input Voltage Range	-15% ~ 15%
Output Voltage Range	-15% ~ 15%
Nominal Current	1155 A
AC Frequency	50Hz / 60Hz±2.5Hz
Switching Time Gap	≤20 ms
Ingress Protection	IP20
Wiring Mode	Three Phase, 4 Wires
Max. Efficiency	99.5% (Full Load)
Cooling Method	Forced Air Cooling
Dimensions (W×D×H)	800×800×2160 mm
Weight	450 kg
Altitude	3000 m