

YOUR
SMART
ENERGY



STORION-TB250/500

COMMERCIAL & INDUSTRIAL SERIES

POWER

250 / 500 kW

CAPACITY

5.7 / 8.1 / 11.5 kWh Modular
Expandable to MWhs



Load Shifting

Off-grid Ability

Peak shaving

Backup Function

Demand Charge Management

24/7 Monitoring

STORION TB250/500



Model		Storion-TB250/500	
System Specification			
Nominal AC Power	250 kW	500 kW	
Max. AC Power	275 kW	550 kW	
Battery Chemistry	LFP (LiFePO4)	LFP (LiFePO4)	
Application Environment	Indoor		
Warranty	3 Year Product Warranty, 10 Year Performance Warranty		

Inverter Technical Specification			
Max. AC Current	397 A	882 A	
Nominal AC Voltage	400 V (3-Phase+N+PE)	380V (3-Phase 3-Wire)	
AC Voltage Range	340 ~ 460 V	342 ~ 418 V	
Rated Frequency	50 / 60 Hz	50 / 60 Hz	
Power Factor Range	0.8~1 leading or lagging	0.8~1 leading or lagging	
Battery Voltage Range	250 ~ 520 V	600 ~ 900 V	
Max. Charging/Discharging Current	550 A	873 A	
Max. Charging/Discharging Power	250 kW	500 kW	
Backup	UPS (With STS Module)	UPS (With STS Module)	
Dimension (W x D x H)	1200 x 800 x 2160 mm	1100 x 800 x 2160 mm	
Weight	600 kg	1280 kg	
Certificate	IEC62477, IEC61000	IEC62477, IEC61000, EN 50549, G99, AS4777	

Battery Technical Specification			
Module Model	M48112-S	M38210-S	M48240-S
Module Nominal Voltage	51.2 V	38.4 V	48 V
Module Weight	65 kg	62 kg	112 kg
Cycle Life	≥ 6000	≥ 6000	≥ 6000
Module Capacity	5.7 kWh	8.1 kWh	11.5 kWh
Operating Temperature Range	-10 °C ~ 50 °C*	-10 °C ~ 50 °C*	-10 °C ~ 50 °C*
Module Dimension (W x D x H)	491 x 611 x 160 mm**	326 x 589 x 232 mm**	590 x 677 x 695 mm**
Max. Charging/Discharging Current	112 A	105 A	120 A

High Voltage Control Box Technical Specification			
BMU Model	HV900112 (TOP BMU required with more than one cluster)	HV900105 (TOP BMU required with more than one cluster)	HV900120 (TOP BMU required with more than one cluster)
DC Voltage Range	200 ~ 900 V	200 ~ 900 V	200 ~ 900 V
Nominal Output Current	112 A	105 A	120 A
Modules Connection	6 ~ 13 in series in one cluster	7 ~ 20 in series in one cluster	6 ~ 16 in series in one cluster
Clusters Connection	Max. 20 clusters in parallel	Max. 20 clusters in parallel	Max. 20 clusters in parallel

*When the temperature is below 0 °C or above 40 °C, the performance will be limited.
**Including hangers and handles.



Alpha ESS Co., Ltd.

+86 513 8060 6891
info@alpha-ess.com
www.alphaess.com
Jiuhua Road 888, Nantong High-Tech Industrial Development Zone, Nantong City, 226300

Alpha ESS Suzhou Co., Ltd.

+86 512 6828 7609
info@alpha-ess.com
www.alphaess.com
Building 10-A, Canal Town Industrial Park, 99 Taihu E Rd, Wuzhong District, Suzhou 215000

Alpha ESS Europe GmbH

+49 610 3459 1601
europe@alpha-ess.de
www.alphaess.de
Paul-Ehrlich-Straße 1a, D-63225 Langen, Hessen

Alpha ESS Australia Pty. Ltd.

+61 402 500 520
Australia@alpha-ess.com
www.alphaess.com
Adelaide: 19 Heath St, Lonsdale SA5160
Sydney: 8/15-21 Gibbes Street, Chatswood, NSW 2067

Alpha ESS Italy S.r.l.

+39 339 462 4288
info@alpha-ess.it
www.alphaess.com
Via Don Minzoni, 17, Calenzano Firenze 50041

Alpha ESS UK Ltd.

+44 145 354 5222
info@alpha-ess.com
Drake House, Long Street, Dursley, gl11 4hh

Alpha ESS International Pte. Ltd.

+65 6513 1125 / +65 6513 1126
Singapore@alpha-ess.com
2 Corporation Road #01-06A Corporation Place Singapore 618494

Alpha ESS USA, Inc.

+1 408 368 7828
usa@alpha-ess.com
Unit 5, 2180 S Ivanhoe St, Denver, CO 80222

Alpha ESS Korea Co., Ltd.

info@alpha-ess.com
2F, 19-4, Nohyeong 11-gil, Jeju-si, Jeju-do, Republic of Korea