



S A N Y M a r i n e

# ELECTRIC TERMINAL TRACTOR



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# ELECTRIC TERMINAL TRACTOR



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## Electric Terminal Tractor

2018年三一海工首台电动集卡下线，累计销售超1000台。

### 2大平台7款电动集卡

- 电动集卡：4×2充电版、4×2换电版、4×2鞍座举升版、6×4充电版
- 无人集卡：IGV无人平板、4×2无人拖头、6×4无人拖头



Electric Terminal Tractor  
SM2500



Electric Terminal Tractor  
STT4500E3



Electric Terminal Tractor  
**STT4501E**



Intelligent Guided Vehicle (IGV)  
**SIGV8850E**

# SM2500



## 高效快充

- 1小时充至90%。

## 驾驶舒适

- 空气悬浮座椅, 舒适性更佳。

## 高效作业

- 电机直驱, 低速大扭矩, 传动更高效。

## 更低能耗

- 热管理与能量回收系统, 能耗降低15%。


## 智能运维

- 支持远程监控与故障诊断, 实现智能充电与运营优化。

## ► Product Parameters

Technical Parameter			Configuration Parameter			
ITEM	UNIT	SM2500	CONFIGURATION	UNIT	SM2500	
Model/Driving Type	-	4×2	Traction battery	Type	-	Charging
Overall Dimensions	mm	5800×2550×3380		Capacity	kWh	282
Wheelbase	mm	3500	E-motor	Power	kW	130/280
Endurance	km	≥120		Torque	N·m	1400/2800
Weight	t	9	Charging time		-	Fast charge 60 min
Max. Traction Capacity	t	70	Front axle/rear axle		t	9/16
Max. Gradeability	%	≥6	The fifth wheel		-	Fixed
Max. Speed	km/h	40	Tire		-	12R22.5-18PR
Min. Turning Radius	m	7				
0~30km/H Accelerate Time	s	≤20				




 The cost per TEU for electric tractors is 73.1% less than for fuel tractors  
**73.1%**

Brand	Cost Per TEU	Unit Price of Energy (USD)	Annual Work Volume (10k TEU)	Annual Energy Cost (10k USD)	Annual Consumption	Equals (Per Ton Standard Coal)
Sany ETT	1.9kWh	0.7	3.6	4.79	72,000kWh	8.85
Fuel TT of Other Brand	0.85L	6.5	3.6	19.87	27.23t	39.48

Note: The energy consumption of each TEU is quoted from the real operation data of a port in South China. Due to the differences in port working conditions, the fluctuation of electricity price and oil price and other factors, the relevant data may vary. The above is for reference only.

# STT4500E3



## 高效换电

- 搭载大容量电池, 2分钟完成换电。

## 驾驶舒适

- 空气悬浮座椅, 舒适性更佳。

## 高效作业

- 电机直驱, 低速大扭矩, 传动更高效。

## 更低能耗

- 热管理与能量回收系统, 能耗降低15%。

## 智能运维

- 支持远程监控与故障诊断, 实现智能充电与运营优化。

## ► Product Parameters

Technical Parameter			Configuration Parameter			
ITEM	UNIT	SM4257	CONFIGURATION	UNIT	SM4257	
Model/Driving Type	-	4×2	Traction Battery	Type	-	Battery Swapping
Overall Dimensions	mm	6370×2550×3690		Capacity	kWh	141/210/282/350
Wheelbase	mm	4000	E-Motor	Power	kW	130/280
Endurance	km	≥120(282kWh)		Torque	N·m	1400/2800
Self Weight	t	9	Battery Swapping		min	5
Max. Traction Capacity	t	70	Front Axle/Rear Axle		t	9/30
Max. Gradeability	%	≥6	Suspension System		-	Fixed
Max. Speed	km/h	40	Tire		-	12R22.5-18PR
Min. Turning Radius	m	7				
0~30km/H Accelerate Time	s	≤20				

## ► Battery Swapping Station



# STT4501E



## 全新二代驾驶室

- 全新二代驾驶室, 视野更佳, 符合人机工程学。

- 最大牵引质量达75吨, 可选配后桥空气悬挂。

## 传动高效

- 适配10-30 km/h工况, 传动效率高, 维护成本低。

## 智能运维

- 支持远程监控与故障诊断, 实现智能充电与运营优化。

## 更低能耗

- 热管理与能量回收系统, 能耗降低15%。

## ► Product Parameters

Technical Parameter		
ITEM	UNIT	STT4501E
Model/Driving Type	-	4×2
Overall Dimensions	mm	5805×2550×3200
Wheelbase	mm	3500
Endurance	km	≥120
Self Weight	t	10
Max. Traction Capacity	t	75
Max. Gradeability	%	≥6
Max. Speed	km/h	40
Min. Turning Radius	m	7.5
0~30km/H Accelerate Time	s	≤20

Configuration Parameter			
CONFIGURATION	UNIT	STT4501E	
Traction Battery	Type	-	Charging
	Capacity	kWh	282
E-Motor	Power	kW	120/240
	Torque	N·m	1200/2800
Charging Time	-	-	Fast Charge 60 min
Front Axle/Rear Axle	t	-	13/34
The Fifth Wheel	Structure	-	Unfixed
	Heights	mm	1180-1530
Tire	-	-	12R22.5-18PR
Suspension System	-	-	Fixed

# SIGV8850E



## 补能多样

- 支持自动充电、手动充电、换电；
- 自动换电时间小于3分钟。

## 灵动操控

- 8×4全轮转向；
- 支持全八字、半八字、斜行、双向行驶四种模式；
- 线控底盘，稳态响应时间<200ms

## 高效节能

- 续航里程达120km；
- 线控复合制动系统，能量回收效率超10%。

## 智驾赋能

- 全场景定位，一步泊车定位精度±5cm；
- 360°无盲区感知。

## 安全可靠

- 箱型梁车架，结构稳定；
- L2级主动安全检测、前后被动防撞装置、控制器冗余设计；
- 高安全动力电池系统，PACK通过273项安全测试。

## ► Product Parameters

Technical Parameter		
ITEM	UNIT	SIGV8850E
Model/Driving Type	-	8×4
Overall Dimensions	mm	15000×2700×1800
Wheelbase	mm	1600/5700/1600
Endurance	km	≥110
Self Weight	t	21
Max. Traction Capacity	t	65
Max. Gradeability	%	≥7
Max. Speed	km/h	38/30
Min. Turning Radius	m	8.2
0~30km/H Accelerate Time	s	≤20

Configuration Parameter			
CONFIGURATION		UNIT	SIGV8850E
Traction Battery	Type	-	Charging / Battery Swapping / Self-Charging
	Capacity	kWh	210/282
E-Motor	Power	kW	2×120/185
	Torque	N·m	2×500/1300
Charging Time		min	60(300kW)
Tire		-	14R24-28PR

## ► Workflow Diagram



► Cases





📍 CWIT



📍 Guangzhou, China

► Cases





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## Sany Marine

SANY Industrial Park, Zhuhai, Guangdong, China  
Service: +86-4008-87-8318 <https://www.sanyglobal.com>

Considering the continuous progress and update of SANY Marine technology,  
the technical parameters and configuration of products are modified and adjusted at any time, so this brochure is for reference only.  
The appearance, configuration and technical parameters of the specific model are subject to the actual model sold.

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