

Mobile Emergency Power Supply Vehicle

TCSS-100-100/250-500/500-1000



Product Overview

Our mobile emergency power supply vehicle is a dynamic storage solution. By utilizing a truck chassis as a platform, we employ lithium iron phosphate batteries as storage units, further enhanced with a safe and reliable bms bess inverter and energy management system.



With STS rapid switching, the switching time is less than 10ms, ensuring power supply reliability.



Intelligent temperature control extends battery life



Module-level active fire suppression system using hexafluoropropane, providing safe and reliable operation



It supports multiple application scenarios such as emergency power protection, dynamic capacity increase, and off-grid power supply



Zero emission of BESS; chassis emission meets the National VI standard



Guarantee uninterrupted protection through always-on firefighting and monitoring



Model	TCSS-100-100	TCSS-250-500	TCSS-500-1000
DC side			
Capacity of single battery	75Ah	280Ah	280Ah
Number of cycles	6000	6000	6000
Battery Voltage range	604.8V-756Vdc	556V-672Vdc	556V-672Vdc
Maximum input	154A	420A	840A
Battery capacity	103.6kWh	510kWh	1032kWh
Output side			
Rated output power	100kW	250kW	500kW
Maximum output power	110kW	275kW	550kW
Output Type	Three-phase four-wire + ground (3 W + N + PE)	Three-phase four-wire + ground (3 W + N + PE)	Three-phase four-wire + ground (3 W + N + PE)
Rated Voltage	400Vac	400Vac	400Vac
Rated Output current	144A	361A	722A
Maximum output current	159A	397A	794A
Isolation method	Transformers	Transformers	Transformers
Grid-connected operation			
Allowable range of	400Vac (-20%~+15%)		
Grid frequency allowed	50±5HZ/60±5HZ		
THDI	≤3%		
Power factor	-0.99 (lag)~ 0.99 (advance)		
Off-grid operation			
Rated Voltage	400V		
Voltage range	400VAC ± 10%		
Rated Output Frequency	50Hz/60Hz		
With unbalanced load	≤100%		
THDU	≤3% (pure resistive load)		
Overload capability	110% overload (10min)120% overload (1min)		
Other parameters			
Designed service life	10 years or 3000 cycles (80%)		
Cooling method	Air-cooling + intelligent air conditioner		
Relative humidity	≤90%RH, non-condensing		
Protection Grade	IP54		
Grid-connection and off automatic switch function	Equipped		
Duration for switching of off-grid	≤10ms		
Communication Interface	RS485/4G/Ethernet		
Cloud platform terminal	Support		
Vehicle Parameters			
Carriage dimension	Approx. 3500 * 2200 * 1950 mm	Approx. 6800*2500*2640 mm	Approx. 9400*2500*2585 mm
Overall vehicle dimension	Approx.5995*2200*3100 mm	Approx.9100*2500*3910 mm	Approx.12000*2520*3830 mm
Chassis manufacturer (can be specified)	Iveco of National Emission Standard VI	Dongfeng of National Emission Standard VI	Dongfeng of National Emission Standard VI
Overall vehicle weight	6500kg	21870kg	31000kg
Maximum number of occupants	3 persons	3 persons	2 persons
Top speed	110km/h	89 km/h	89 km/h
Hydraulic support system	Equipped		
Sound and heat insulation lay	Equipped		
Cable and cable winding machine	Built with adjustable motor, able to accommodate 50m cable		
GPS	Equipped		
Fire fighting system	Standard configuration		
Ventilation and heat dissipation system	Standard configuration		
Light system	Standard configuration		
Body appearance and color	Engineering Yellow (customerization available)		
Environment Parameters			
Operation ambient temperature	-15°C ~ 50°C		
Limit Operating Temperature	-20°C~55°C		
Optimal Operating Temperature	20°C~30°C		
Altitude	≤2000m (over 3000 m, please derate; at 3000 m ~ 5000 m, conduct linear derating to 30%)		
	≤3000m(over 3000 m, please derate; at 3000 m ~ 5000 m, conduct linear derating to 30%)		