

StratoForse-SS, StratoForse-SS+ **Stop-Start Battery**



Sodium Ion Technology Datasheet v1.8

Thank you for choosing the Aeson Power sodium-ion (NFPP) technology for your vehicle.

Application

The StratoForse Series are automotive sodium-ion start batteries suitable for cars, SUV's, 4x4's and light commercial vans. They are not designed for UPS/standby or deep cycle applications.

Item	Features	Specifications		
	Series	StratoForse-SS, StratoForse-SS+		
	Application	Automotive Stop-Start battery		
	Technology	Sodium Ion (Na)		
Series Characteristics	Cathode Material	Polyanionic		
	Chemistry	$Na_4Fe_3(PO_4)_2(P_2O_7)$ (NFPP)		
	Communication	No BMS or Bluetooth		
	Warranty Periods	Refer to Series Warranty Document		
	Nominal Voltage	12V		
	Cell Voltage	2.85V		
	Cell Quantity	4		
	Nominal Capacity (Ah)	Refer to Model List		
Electrical	Usable Capacity	100%		
	Cold Cranking Amps (CCA)	Refer to Model List		
	Reserve Capacity (9.0V min.)	Refer to Model List		
	Battery Capacity @ 25°C (6.0V min.)	Refer to Model List		
	Battery Capacity @ 25°C (10.5V min.)	Refer to Model List		
	Energy	Refer to Model List		
	Engine Starts	180,000		



mode. You can also use lead batte but do not use de-sulphation or charger Type (Recommended) recondition mode.		Cycles	3,000 – 50% DoD @ 1C @ 25°C		
Charge Voltage (Recommended) Absorption Voltage Float Voltage 14.6V Charge Rate (Recommended) Charge Rate - Max. Discharge Rate - Max. Charging Temperature Range Discharging Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Refer to Model List Refer to Model List Case Material Polypropylene (PP)		Voltage Range (Working)	6V – 14.6V		
Absorption Voltage Float Voltage Charge Rate (Recommended) Charge Rate - Max. Charging Temperature Range Discharging Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Refer to Model List Weight Refer to Model List Polypropylene (PP)		Maximum Voltage	15.2V		
Float Voltage Charge Rate (Recommended) Charge Rate - Max. Discharge Rate - Max. Charging Temperature Range Discharging Temperature Range Discharging Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Refer to Model List Weight Refer to Model List Polypropylene (PP)		Charge Voltage (Recommended)	14.6V		
Charge Rate (Recommended) Charge Rate - Max. Discharge Rate - Max. Charging Temperature Range Discharging Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Weight Refer to Model List Refer to Model List Polypropylene (PP)		Absorption Voltage	N/A		
Charge Rate - Max. Discharge Rate - Max. Charging Temperature Range Discharging Temperature Range Storage Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Weight Refer to Model List Refer to Model List Case Material Polypropylene (PP)		Float Voltage	14.6V		
Discharge Rate − Max. Charging Temperature Range Discharging Temperature Range Discharging Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Weight Refer to Model List Case Material Polypropylene (PP)		Charge Rate (Recommended)	0.5C		
Charging Temperature Range 0°C to +80°C Discharging Temperature Range -30°C to +80°C Storage Temperature Range Short term: -30°C to +45°C Long term: 0°C to +40°C Long term: 0°C to +40°C Electrical <30 mΩ		Charge Rate - Max.	1C		
Electrical Discharging Temperature Range Storage Temperature Range Internal Resistance Self-discharge Rate Charger Type (Recommended) Charger Type (Recommended) Dimensions (L x W x H) Weight Case Material Short term: -30°C to +45°C Long term: 0°C to +40°C Long term: 0°C to +40°C Long term: 0°C to +40°C Long term: -30°C to +45°C Long term: -30°C to +40°C Lithium, but do not use recondition mode. Constant current or Power Supplementary terms of the supplementa		Discharge Rate – Max.	2C		
Discharging Temperature Range -30°C to +80°C Short term: -30°C to +45°C Long term: 0°C to +40°C Long term: 0°C to +40°C Internal Resistance <30 mΩ		Charging Temperature Range	0°C to +80°C		
Storage Temperature Range Long term: 0°C to +40°C Internal Resistance <30 mΩ	Electrical	Discharging Temperature Range	-30°C to +80°C		
Self-discharge Rate ≈ 3% per month Transportation Voltage 0.0V Lithium, but do not use recondition mode. You can also use lead batte but do not use de-sulphation or recondition mode. Charger Type (Recommended) Constant current or Power Suppl mode is also recommended. Dimensions (L x W x H) Refer to Model List Weight Refer to Model List Polypropylene (PP)		Storage Temperature Range			
Transportation Voltage Charger Type (Recommended) Charger Type (Recommended) Charger Type (Recommended) Constant current or Power Supplemode is also recommended. Dimensions (L x W x H) Weight Refer to Model List Weight Case Material Polypropylene (PP)		Internal Resistance			
Charger Type (Recommended) Charger Type (Recommended) Charger Type (Recommended) Constant current or Power Supplemode is also recommended. Dimensions (L x W x H) Weight Refer to Model List Case Material Polypropylene (PP)		Self-discharge Rate	≈ 3% per month		
Charger Type (Recommended) Charger Type (Recommended) Constant current or Power Supplemode is also recommended. Dimensions (L x W x H) Weight Case Material Rode. You can also use lead batte but do not use de-sulphation or recondition mode. Refer to Power Supplemode is also recommended. Refer to Model List Polypropylene (PP)		Transportation Voltage	0.0V		
Dimensions (L x W x H) Refer to Model List Weight Refer to Model List Polypropylene (PP)		Charger Type (Recommended)	Lithium, but do not use recondition mode. You can also use lead battery, but do not use de-sulphation or recondition mode.		
Weight Refer to Model List Case Material Polypropylene (PP)			Constant current or Power Supply mode is also recommended.		
Case Material Polypropylene (PP)	Mechanical	Dimensions (L x W x H)	Refer to Model List		
		Weight	Refer to Model List		
Case Hold Down Type Base side or End		Case Material	Polypropylene (PP)		
		Case Hold Down Type	Base side or End		
Carry Handle Yes		Carry Handle	Yes		
SAE AP (standard) Terminal Types Mechanical JIS (Standard or Small)		Terminal Types			
L = Left Hand Negative Terminal Layouts R = Right Hand Negative (facing front)		Terminal Layouts	R = Right Hand Negative		
Terminal Material Aluminium with Copper		Terminal Material			
IP Rating 65					
Circuit Protection Internal fuse					



	Parallel Connection ONLY	Yes, up to 3 batteries		
	Series Connection ONLY	Yes, up to 2 batteries		
	Maintenance Free	Yes		
	Fully Sealed	Yes		
Special Features	Acid Free	Yes		
	No Spill	Yes		
	Fire Safety	High. Cathode material structural rigidity + electrochemical stability		
	Environmental Rating	High. Recyclable Materials		
Certification	Certifications, Standards Compliance and Registration	CE-EMC, UN38.3, IEC61000, EESS, IEC62619* E/N 50342*, JB/T 12666-2015* * Compliant - passed testing, but no certification because no specific international Sodium Ion standard yet.		
BMS	Over-charge protection	N/A		
	Over-discharge protection	N/A		
	Short-circuit protection	N/A		
	Temperature protection	N/A		

This Model List shows all the models in the Series to provide information specific to the individual batteries.

Model: StratoForse-SS	Cold Cranking Amps: CCA	Energy: Wh	Reserve Capacity Minutes: (9.0V min.)	Battery Capacity @ 25°C: Ah (6.0V min.)	Terminal Type	Dimensions (L x W x H): mm	Weight ± 0.5kg: Kgs
Q85L	650	396	70	33	SAE AP	232 x 173 x 220	6.0
S95L	720	480	86	40	SAE AP	260 x 173 x 220	7.0
H5/LN2	650	396	70	33	SAE AP	242 x 175 x 190	6.1
H6/LN3	750	480	86	40	SAE AP	278 x 175 x 185	7.0
H7/LN4	800	480	86	40	SAE AP	315 x 175 x 190	7.2
H8/LN5	850	594	106	49.5	SAE AP	354 x 175 x 190	8.5
H9/LN6	950	720	130	60	SAE AP	394 x 175 x 190	10.0
StratoForse-SS+							
H6/LN3	850	594	106	49.5	SAE AP	278 x 175 x 185	8.2



Contact Details

This product is manufactured by Aeson Power Pty Ltd (ABN: 94 631 781 121) of:

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