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 Characteristics	Series	StratoForse-SS, StratoForse-SS+
	Application	Automotive Stop-Start battery
	Technology	Sodium Ion (Na)
	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
Electrical	Nominal Voltage	12V
	Cell Voltage	2.85V
	Cell Quantity	4
	Nominal Capacity (Ah)	Refer to Model List
	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

Electrical	Cycles	3,000 – 50% DoD @ 1C @ 25°C
	Voltage Range (Working)	6V – 14.6V
	Maximum Voltage	15.2V
	Charge Voltage (Recommended)	14.6V
	Absorption Voltage	N/A
	Float Voltage	14.6V
	Charge Rate (Recommended)	0.5C
	Charge Rate - Max.	1C
	Discharge Rate – Max.	2C
	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
	Internal Resistance	<30 mΩ
	Self-discharge Rate	≈ 3% per month
	Transportation Voltage	0.0V
	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. Constant current or Power Supply mode is also recommended.
Mechanical	Dimensions (L x W x H)	Refer to Model List
	Weight	Refer to Model List
	Case Material	Polypropylene (PP)
	Case Hold Down Type	Base side or End
	Carry Handle	Yes
	Terminal Types	SAE AP (standard) JIS (Standard or Small)
	Terminal Layouts	L = Left Hand Negative R = Right Hand Negative (facing front)
	Terminal Material	Aluminium with Copper
	IP Rating	65
	Circuit Protection	Internal fuse

Special Features	Parallel Connection ONLY	Yes, up to 3 batteries
	Series Connection ONLY	Yes, up to 2 batteries
	Maintenance Free	Yes
	Fully Sealed	Yes
	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:

63/67 Smeaton Ave, Dandenong South, Victoria, AUSTRALIA 3175

If you have any queries in relation to this document, you can contact Aeson Power:

Website: www.aesonpower.com.au

Email info@aesonpower.com.au

Phone +61 3 9545 5993