



StratoForse

Start Battery

Sodium Ion Technology

Datasheet v1.9

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
	Application	Automotive Start battery
	Technology	Sodium Ion (Na)
	Cathode Material	Polyanionic
	Chemistry	$\text{Na}_4\text{Fe}_3(\text{PO}_4)_2(\text{P}_2\text{O}_7)$ (NFPP)
	Communication	No BMS or Bluetooth
	Warranty Period	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	Refer to Model List

Electrical	min.)	
	Energy	Refer to Model List
	Engine Starts	120,000
	Cycles	2,700 – 50% DoD @ 1C @ 25°C
	Internal Resistance	<30 mΩ
	Voltage Range (Working)	6V ~ 14.6V
	Maximum Voltage	15.2V
	Charge Voltage (Recommended)	14.6V
	Absorption Voltage	N/A
	Float Voltage	13.7V
	Charge Rate - Max.	1C
	Discharge Rate – Max.	2C
	Charging Temperature Range	0°C ~ +80°C
	Discharging Temperature Range	-30°C ~ +80°C
	Storage Temperature Range	Short term: -30°C ~ +45°C Long term: 0°C ~ +40°C
	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 - mm
	Weight	Refer to Model List – kg
	Case Material	Polypropylene (PP)
	Case Hold Down Type	Base side or End
	Carry Handle	Yes

Mechanical	Terminal Types	SAE AP (standard) JIS (Standard or Narrow)
	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
Certification	Environmental Rating	High. Recyclable Materials
	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	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
H4/LN1	360	198	35	16.5	SAE AP	207 x 175 x 190	4.0
H5/L2-440L	450	240	42	20	SAE AP	242 x 175 x 190	4.5
NS40L	350	198	35	16.5	JIS Small	196 x 127 x 220	4.0
NS60L	370	198	35	16.5	JIS Small	238 x 129 x 220	4.2
NS60L-Pro	420	240	42	20	JIS Small	238 x 129 x 220	4.5
55D23L	450	240	42	20	SAE AP	232 x 173 x 220	4.5
55D26L	450	240	42	20	SAE AP	260 x 173 x 220	5.0
55D26R	450	240	42	20	SAE AP	260 x 173 x 220	5.0
80D31R	520	312	55	26	SAE AP	360x 173 x 220	5.5
95D31L	650	376	70	33	SAE AP	306 x 173 x 220	6.4
95D31R	650	376	70	33	SAE AP	306 x 173 x 220	6.4
95D31R Pro	800	594	106	49.5	SAE AP	306 x 173 x 220	8.2

Contact Details

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