

SA12-10

12V 10AH

AGM Valve Regulated Lead Acid Battery

SA series is a general purpose battery with 8 years design life in float service. It meets with IEC, JIS, BS, GB/T and YD/T standards. With advanced AGM valve regulated technology and high purity raw material, the SA series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPs, telecom, power grid, medical equipment, emergency light and security system applications.

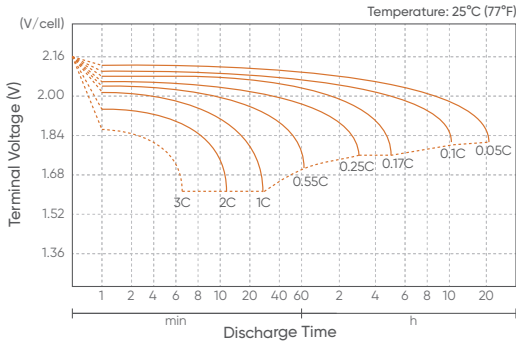


Specification		Dimensions
Cells Per Unit	6	<p>Length 151±1.5mm (5.94 inches)</p> <p>Width 98±1.5mm (3.86 inches)</p> <p>Height 95±1.5mm (3.74 inches)</p> <p>Total Height 101±1.5mm (3.98 inches)</p> <p>Terminal M5 Value 6-7 N*m</p> <p>Terminal M6 Value 8-10 N*m</p> <p>Terminal M8 Value 10-12 N*m</p>
Voltage Per Unit	12	
Capacity	10Ah@20hr-rate to 1.75V per cell @25°C	
Weight	Approx. 3.15Kg (Tolerance ±3.0%)	
Internal Resistance	Approx. 18mΩ	
Terminal	F1 / F2	
Max. Discharge Current	100A (5 sec)	
Short Circuit Current	550A	
Design Life	8 years (Float charging)	
Maximum Charging Current	3.0 A	
Reference Capacity	C3 7.74AH C5 8.73AH C10 9.35AH C20 10.0AH	
Standby Use Voltage	13.7V~13.9V @25°C Temperature Compensation: -3mV/°C/Cell	
Cycle Use Voltage	14.6V~14.8V @25°C Temperature Compensation: -4mV/°C/Cell	
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C	
Normal Operating Temperature Range	25°C ± 5°C	
Self Discharge	SunArk Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.	
Container Material	A.B.S. UL94-HB, UL94-V0 Optional	

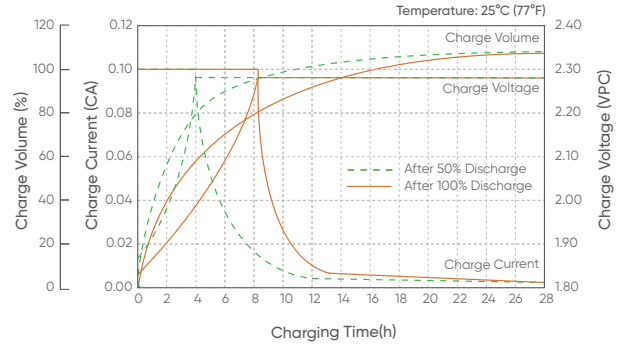
Constant Current Discharge Characteristics: A (25°C)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	37.94	26.81	19.38	11.13	6.110	3.751	2.820	2.277	1.886	1.214	0.986	0.521
1.65V	35.28	25.34	18.53	10.69	5.900	3.632	2.733	2.215	1.837	1.200	0.974	0.512
1.70V	31.83	23.33	17.36	10.22	5.708	3.512	2.659	2.155	1.790	1.182	0.959	0.506
1.75V	28.52	21.35	16.15	9.764	5.500	3.389	2.579	2.100	1.745	1.166	0.947	0.500
1.80V	25.04	19.33	14.91	9.333	5.289	3.268	2.500	2.039	1.700	1.146	0.935	0.495
1.85V	19.88	15.80	12.38	8.038	4.744	2.994	2.311	1.896	1.585	1.076	0.880	0.470

Constant Current Discharge Characteristics: A (25°C)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	62.90	45.58	33.89	20.22	11.48	7.110	5.386	4.371	3.636	2.371	1.938	1.025
1.65V	59.17	43.90	32.88	19.62	11.15	6.916	5.242	4.268	3.555	2.349	1.917	1.010
1.70V	54.60	41.16	31.25	18.94	10.86	6.725	5.122	4.168	3.475	2.318	1.891	0.999
1.75V	50.00	38.35	29.51	18.29	10.52	6.521	4.990	4.077	3.399	2.291	1.868	0.988
1.80V	44.84	35.32	27.63	17.66	10.18	6.319	4.855	3.974	3.323	2.257	1.847	0.980
1.85V	36.34	29.38	23.25	15.36	9.185	5.821	4.508	3.708	3.109	2.124	1.741	0.932

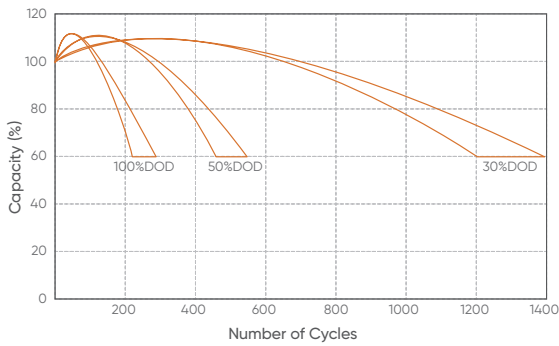
Discharge Characteristics Curve



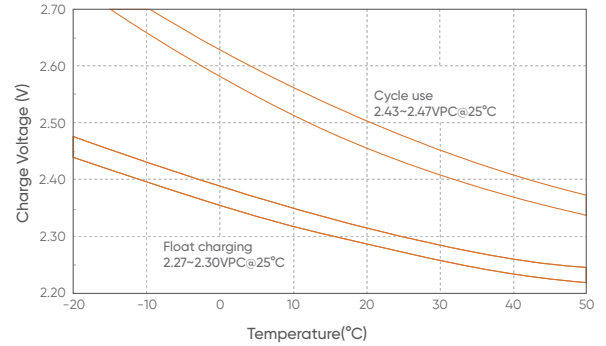
Charge Characteristic Curve for Standby Use



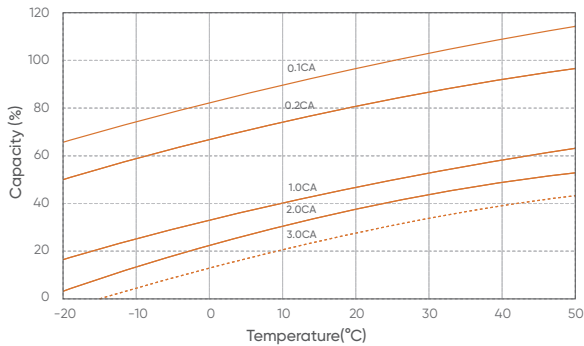
Cycle Life in Relation to Depth of Discharge



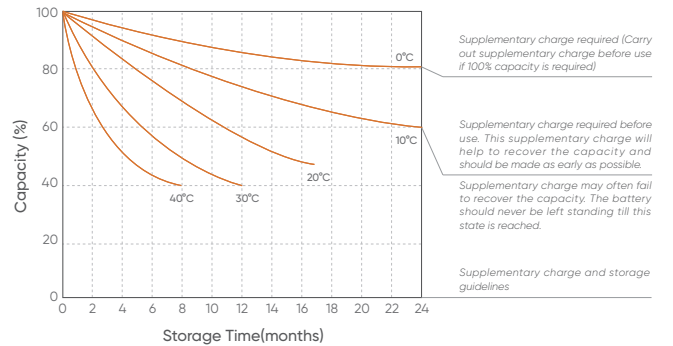
Relationship Between Charging Voltage and Temperature



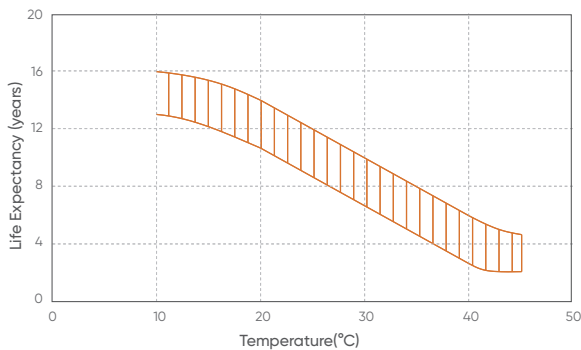
Temperature Effects on Capacity



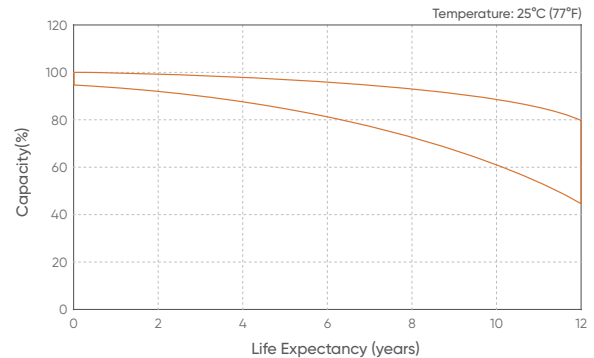
Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, SunArk reserves the right to explain and update the latest information.