

SA12-7

12V 7AH

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.

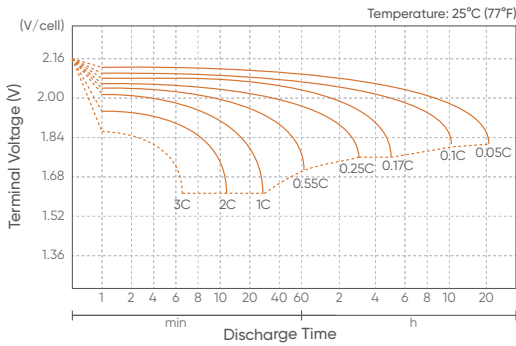


Specification		Dimensions
Cells Per Unit	6	
Voltage Per Unit	12	
Capacity	7Ah@20hr-rate to 1.75V per cell @25°C	
Weight	Approx. 1.95Kg (Tolerance ±3.0%)	
Internal Resistance	Approx. 36mΩ	
Terminal	F1 / F2	
Max. Discharge Current	70A (5 sec)	
Short Circuit Current	340A	
Design Life	8 years (Float charging)	
Maximum Charging Current	2.1 A	
Reference Capacity	C3 5.42AH C5 6.11AH C10 6.54AH C20 7.00AH	
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	
		<p>Length 151±1.5mm (5.94 inches)</p> <p>Width 65±1mm (2.56 inches)</p> <p>Height 94±1mm (3.70 inches)</p> <p>Total Height 100±1mm (3.94 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>

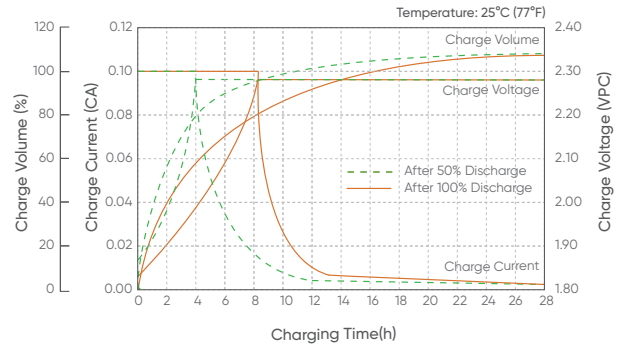
Constant Current Discharge Characteristics: A (25°C)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	25.76	18.39	13.43	7.715	4.277	2.626	1.974	1.594	1.320	0.850	0.690	0.364
1.65V	23.96	17.38	12.84	7.407	4.130	2.542	1.913	1.551	1.286	0.840	0.682	0.359
1.70V	21.62	16.00	12.03	7.080	3.996	2.458	1.861	1.508	1.253	0.827	0.672	0.354
1.75V	19.37	14.65	11.19	6.767	3.850	2.372	1.806	1.470	1.221	0.816	0.663	0.350
1.80V	17.00	13.26	10.34	6.468	3.703	2.288	1.750	1.428	1.190	0.802	0.654	0.347
1.85V	13.50	10.84	8.577	5.570	3.321	2.096	1.618	1.327	1.109	0.753	0.616	0.329

Constant Current Discharge Characteristics: A (25°C)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	42.71	31.27	23.48	14.01	8.037	4.977	3.770	3.060	2.545	1.660	1.357	0.718
1.65V	40.17	30.12	22.78	13.59	7.806	4.841	3.669	2.988	2.489	1.645	1.342	0.707
1.70V	37.07	28.23	21.66	13.12	7.599	4.708	3.585	2.918	2.432	1.623	1.324	0.700
1.75V	33.95	26.31	20.45	12.67	7.366	4.564	3.493	2.854	2.379	1.604	1.308	0.692
1.80V	30.45	24.23	19.15	12.24	7.125	4.423	3.398	2.782	2.326	1.580	1.293	0.686
1.85V	24.67	20.16	16.11	10.64	6.430	4.075	3.156	2.595	2.176	1.487	1.219	0.652

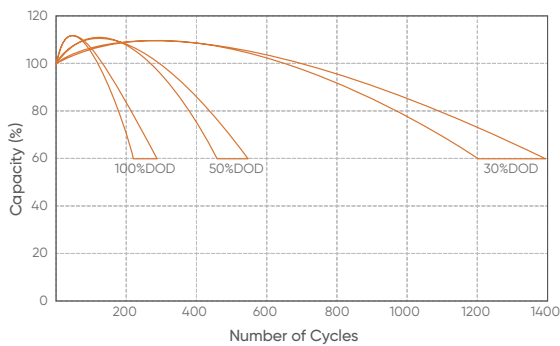
Discharge Characteristics Curve



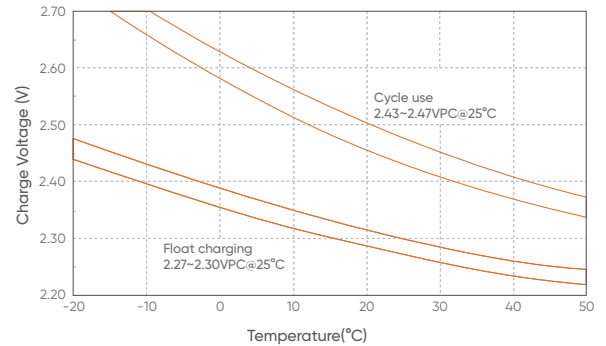
Charge Characteristic Curve for Standby Use



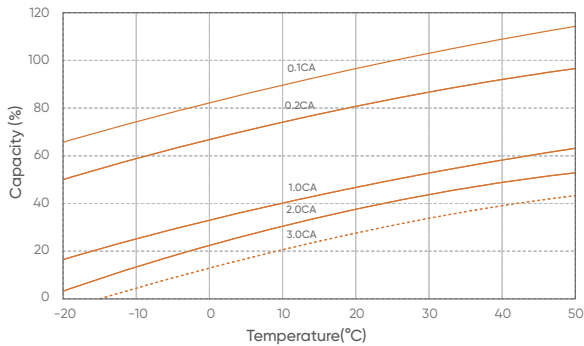
Cycle Life in Relation to Depth of Discharge



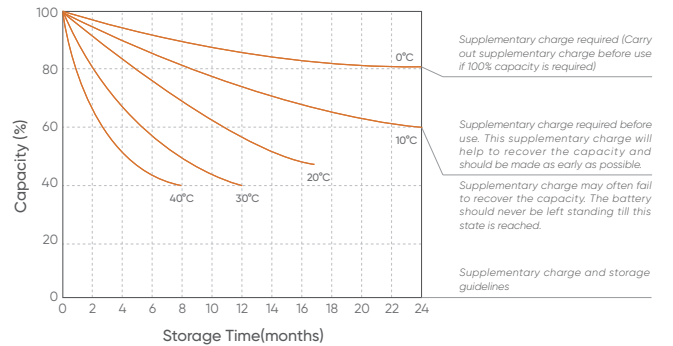
Relationship Between Charging Voltage and Temperature



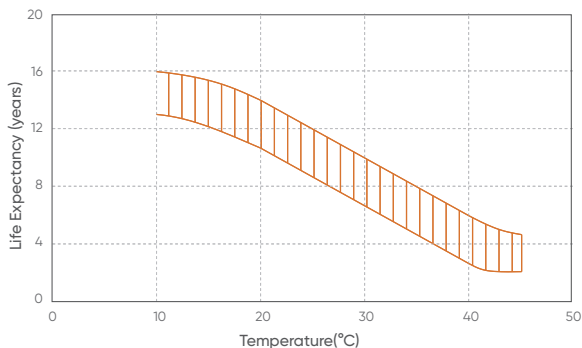
Temperature Effects on Capacity



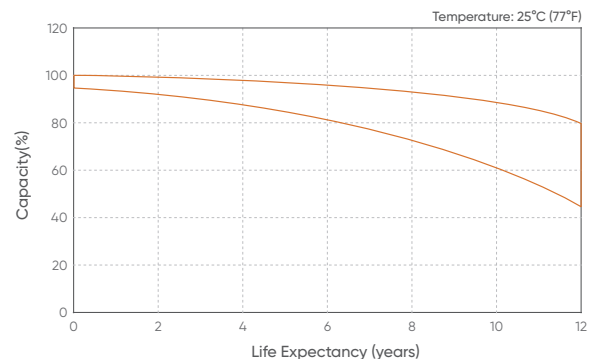
Storage Characteristics



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.