

# SA12-35

## 12V 35AH

### AGM Valve Regulated Lead Acid Battery

SA series is a general purpose battery with 12 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.

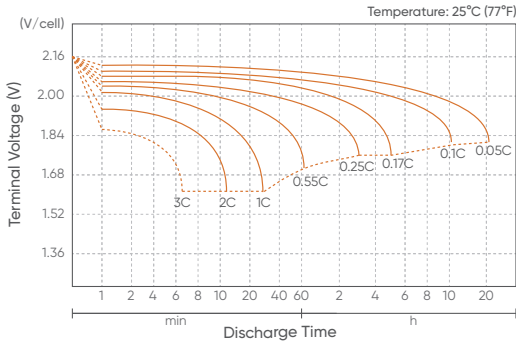


Specification		Dimensions
Cells Per Unit	6	<p>Length <b>195±2mm (7.68 inches)</b></p> <p>Width <b>130±2mm (5.12 inches)</b></p> <p>Height <b>155±2mm (6.10 inches)</b></p> <p>Total Height <b>168±2mm (6.61 inches)</b></p> <p>Terminal M5 Value <b>6-7 N*m</b></p> <p>Terminal M6 Value <b>8-10 N*m</b></p> <p>Terminal M8 Value <b>10-12 N*m</b></p>
Voltage Per Unit	12	
Capacity	35Ah@10hr-rate to 1.80V per cell @25°C	
Weight	Approx. 10.5Kg (Tolerance ±3.0%)	
Internal Resistance	Approx. 10.0mΩ	
Terminal	F7(M8) / F11(M6)	
Max. Discharge Current	350A (5 sec)	
Short Circuit Current	880A	
Design Life	12 years (Float charging)	
Maximum Charging Current	10.5 A	
Reference Capacity	C3 29.8AH C5 30.6AH C10 35.0AH C20 37.0AH	
Standby Use Voltage	13.6V~13.8V @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	

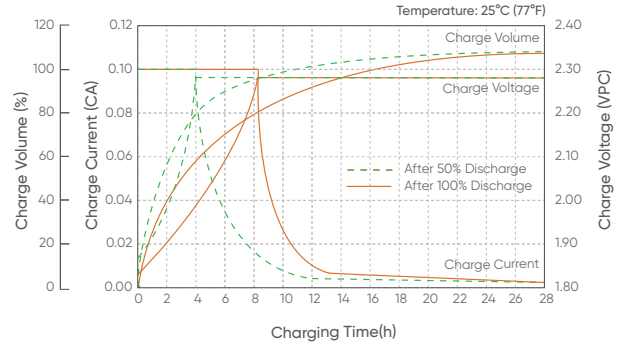
Constant Current Discharge Characteristics: A (25°C)											
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	113.2	87.1	53.4	30.7	15.9	10.9	8.15	6.60	4.44	3.69	1.93
1.65V	106.2	82.5	50.9	29.2	15.4	10.5	7.93	6.43	4.39	3.65	1.90
1.70V	102.4	80.0	49.4	28.4	14.9	10.2	7.71	6.26	4.32	3.59	1.88
1.75V	96.1	76.2	48.0	27.9	14.4	9.93	7.51	6.11	4.26	3.55	1.85
1.80V	89.9	72.4	46.6	27.4	13.9	9.63	7.30	5.95	4.19	3.50	1.84
1.85V	83.3	68.3	44.9	26.7	13.2	8.90	6.78	5.55	3.93	3.29	1.74

Constant Power Discharge Characteristics : WPC (25°C)											
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	206.1	159.5	98.3	56.7	30.2	20.7	15.6	12.7	8.67	7.26	3.80
1.65V	195.3	152.6	94.6	54.6	29.4	20.2	15.3	12.4	8.59	7.18	3.75
1.70V	190.4	149.7	93.0	53.7	28.6	19.7	14.9	12.2	8.47	7.08	3.71
1.75V	181.1	144.5	91.6	53.5	27.7	19.2	14.6	11.9	8.37	7.00	3.67
1.80V	171.7	139.2	90.0	53.2	26.8	18.7	14.2	11.6	8.25	6.92	3.63
1.85V	162.4	134.0	88.5	52.9	26.7	17.4	13.3	10.9	7.76	6.52	3.46

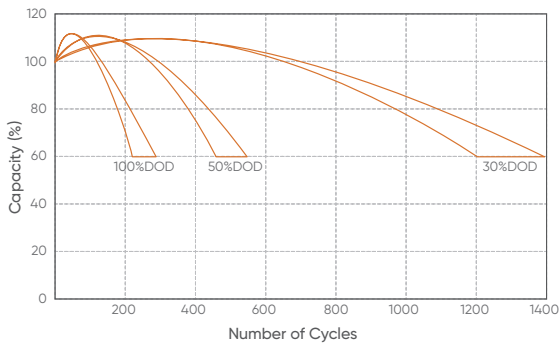
### Discharge Characteristics Curve



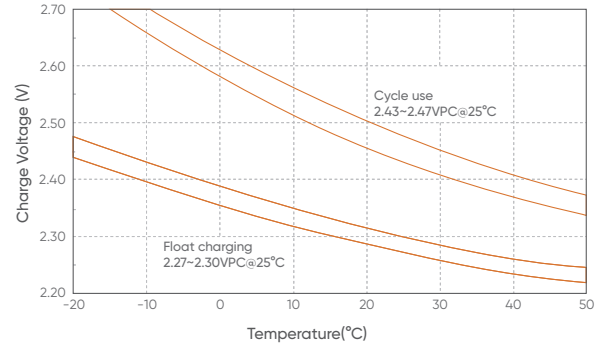
### Charge Characteristic Curve for Standby Use



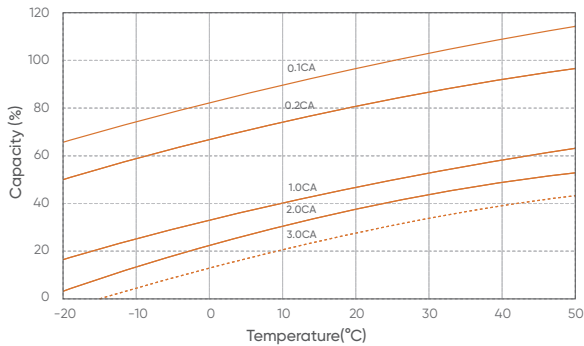
### Cycle Life in Relation to Depth of Discharge



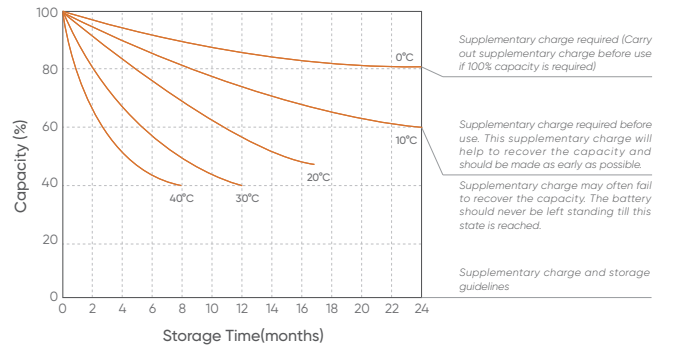
### Relationship Between Charging Voltage and Temperature



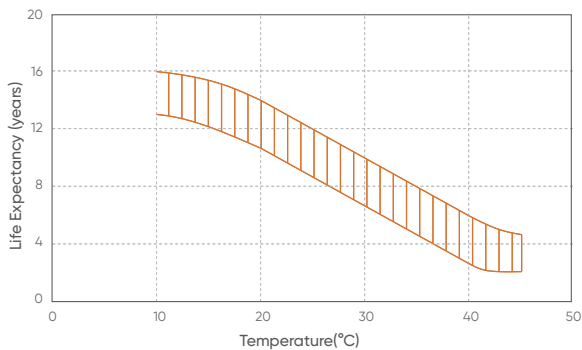
### Temperature Effects on Capacity



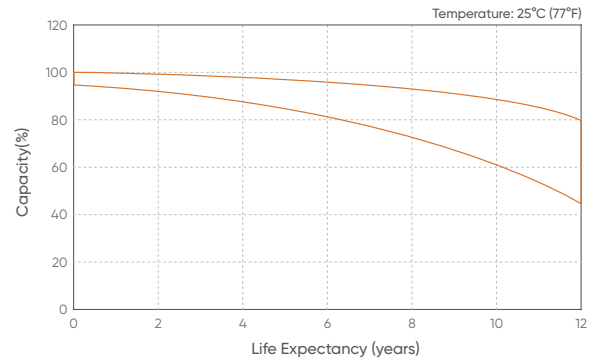
### Storage Characteristics



### 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.