

Sealed Lead Acid (SLA) Batteries

12V 7AH - 4.8mm/F1 Terminal

Model: S 4538



This 12V 7Ah sealed lead acid (SLA) battery is a compact battery for powering 12V equipment. It is commonly used in battery back up systems, alarm and communications systems and UPS units. Fitted with 4.8mm/F1 tab terminals, these batteries are easily user replaced in most equipment they are used in. Cells are fully sealed to prevent any leakage of electrolyte.

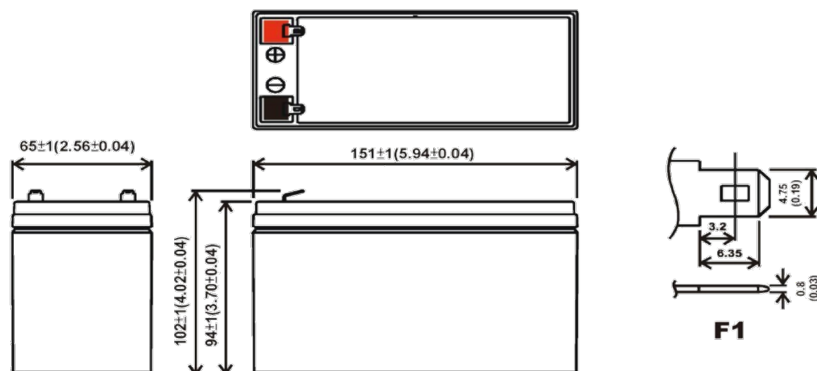
Our range of Powerhouse SLA batteries are from a quality supplier and are graded for use in UPS systems. We have found the quality of SLA batteries varies considerably between suppliers and often cheaper units have a shorter life span.

ActivFire Listed (afp3824). Conforms to IEC 60896-21:2004 and IEC 60896-22:2004.

Cell per unit	6	Ambient temperature	
Nominal Voltage (V)	12	Charge	0°C (32°F) to 40°C (104°F)
Nominal Capacity (Ah)	7Ah@ 20hour rate F.V(1.75/cell)	Discharge	-15°C (5°F) to 50°C (122°F)
Weight	Approx. 2kg	Storage	-15°C (5°F) to 40°C (104°F)
Internal Resistance (1KHz)	28mΩ	Max charge Current	
Max Discharge Current (5s)	70A		Max charge current : 2.1A
Battery Life :	Stand by : 3~5 years	Cycle use :	Charge voltage: 14.4 to 15.0V
Terminal Type	F1.	Stand by :	Charge voltage: 13.50 to 13.80V
Container Material	ABS(Option : 94-HB & 94V-0 flame retardant case)		



DIMENSIONS	Length	Width	Height	Total Height
Unit: mm	151±1	65±1	94±1	102±1
Unit: inch	5.94±0.04	2.56±0.04	3.70±0.04	4.02±0.04



Constant current discharge characteristics Unit:A(25°C 77°F)										
F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	26.1	12.7	7.23	4.16	2.19	0.78	1.24	0.77	0.64	0.36
1.67V	25.3	12.3	7.08	4.12	2.10	1.70	1.19	0.77	0.64	0.36
1.70V	24.9	11.9	6.99	3.96	2.07	1.68	1.18	0.76	0.64	0.35
1.75V	23.2	11.6	6.77	3.88	2.00	1.62	1.17	0.76	0.64	0.35
1.80V	20.5	10.5	6.71	3.61	1.92	1.54	1.16	0.75	0.63	0.34

Constant power discharge characteristics Unit:W(25°C 77°F)										
F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	282	142	81	48.6	24.2	20.8	14.1	8.91	7.16	4.22
1.67V	281	139	79	48.2	24.9	20.4	14.0	8.85	7.16	4.23
1.70V	275	136	76	47.6	24.7	19.5	13.9	8.72	7.15	4.19
1.75V	266	132	73	46.8	24.2	18.6	13.8	8.62	7.11	4.17
1.80V	242	130	39	45.3	23.4	18.2	13.4	8.48	7.00	4.16

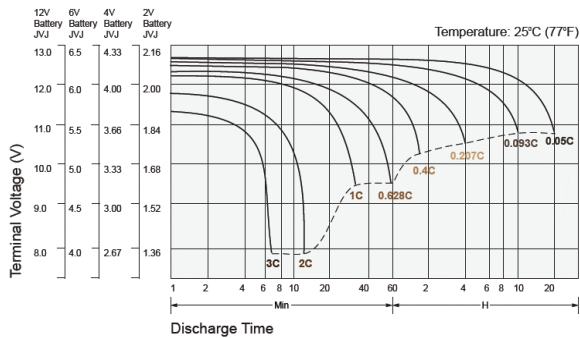
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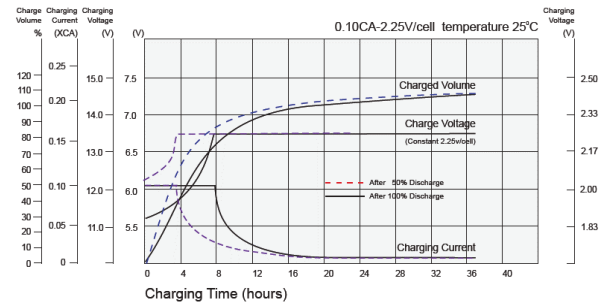
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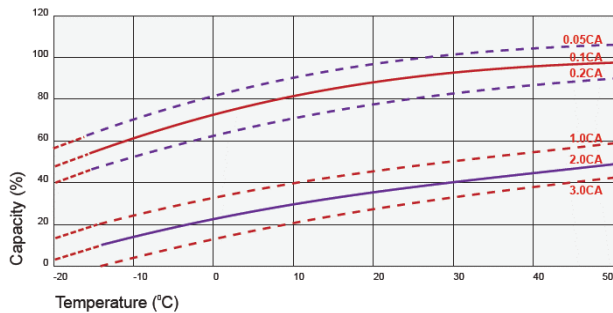
Battery Discharge Characteristics (25°C/77°F)



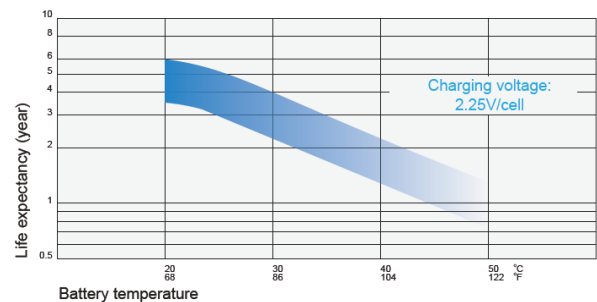
Battery Charge Characteristic for standby use



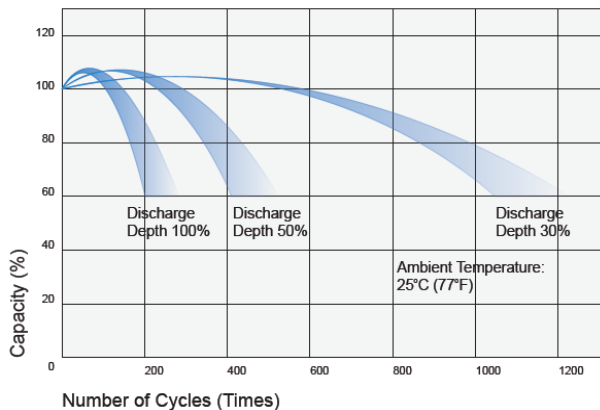
Temperature Effects in Relation to Battery Capacity



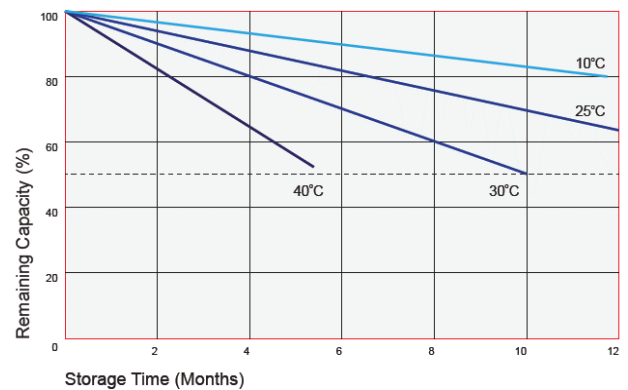
Temperature Effects on Long Term Float Life



Cycle Service Life



Self Discharge Characteristics



Charging Procedures

Application	Charge Voltage(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.25C
Standby	25°C(77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge Current (A)	0.2C>(A)	0.2C<(A) <0.5C	0.5C<(A) <1.0C	(A)>1.0C