

# Sealed Lead Acid (SLA) Batteries

## 6V 12AH - 4.8mm/F1 Terminal

### Model: S 4501

**Powerhouse**  
BATTERIES



This 6V 12Ah sealed lead acid (SLA) battery is a compact battery for powering 6V equipment. It is commonly used in battery back up systems, alarm and communications systems and UPS units. Fitted with 4.8mm spade connection tabs, these batteries are easily user replaced in most equipment they are used in. Cells are fully sealed to prevent any leakage of electrolyte.

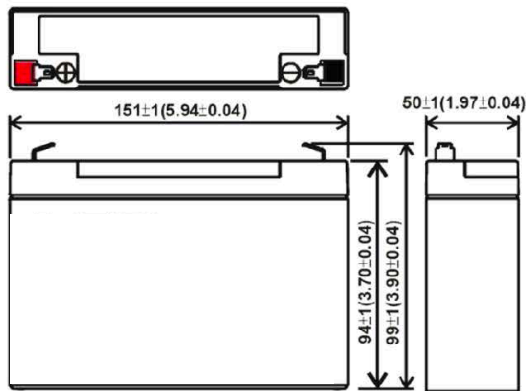
Our range of Powerhouse SLA batteries are from a quality supplier and are graded for use in UPS systems. We have found the quality of SLA batteries varies considerably between suppliers and often cheaper units have a shorter life span.

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

<b>Cell per unit</b>	3	<b>Ambient temperature</b>	
<b>Nominal Voltage (V)</b>	6	Charge	0°C (30°F) to 40°C (104°F)
<b>Nominal Capacity (Ah)</b>	12Ah@ 20hour rate F.V(1.75/cell)	Discharge	-15°C (5°F) to 50°C (122°F)
<b>Weight</b>	Approx 1.85kg(4.08Lbs.)	Storage	-15°C (5°F) to 40°C (104°F)
<b>Internal Resistance (1KHz)</b>	25mΩ	<b>Max charge Current</b>	
<b>Max Discharge Current (5s)</b>	240A		Max charge current : 3.3A
<b>Battery Life :</b>	Stand by : 3~5 years	<b>Cycle use :</b>	Charge voltage : 7.2 to 7.5V
<b>Terminal Type</b>	F1	<b>Stand by :</b>	Charge voltage : 6.75 to 6.90V
<b>Container Material</b>	ABS(Option : 94-HB & 94V-0 flame retardant case)		



DIMENSIONS	Length	Width	Height	Total Height
Unit: mm	151±1	50±1	94±1	100±1
Unit: inch	5.94±0.04	1.97±0.04	3.70±0.04	3.94±0.04



mm(inch)

#### 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	52.8	25.0	14.0	7.85	4.34	3.04	2.065	1.482	1.150	0.606
1.65V	51.1	24.6	13.9	7.78	4.30	3.02	2.058	1.480	1.149	0.605
1.70V	48.8	24.0	13.7	7.70	4.26	3.00	2.015	1.475	1.146	0.603
1.75V	46.0	23.3	13.4	7.56	4.22	3.00	2.040	1.465	1.140	0.600
1.80V	39.0	22.3	12.9	7.32	4.17	2.92	2.011	1.460	1.124	0.593

#### 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	264.0	132.7	75.9	42.9	21.3	16.7	11.4	7.86	6.32	3.33
1.65V	254.4	130.3	75.1	42.5	22.0	16.6	11.3	7.80	6.32	3.33
1.70V	244.3	127.2	74.1	41.9	21.8	16.5	11.3	7.69	6.30	3.31
1.75V	230.2	123.2	72.4	41.2	21.3	16.4	11.2	7.60	6.27	3.31
1.80V	198.8	117.7	69.7	40.0	20.6	16.0	11.1	7.48	6.18	3.25

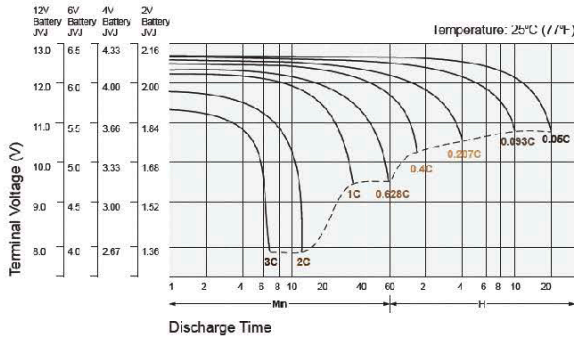
# Sealed Lead Acid (SLA) Batteries

## 6V 12AH - 4.8mm/F1 Terminal

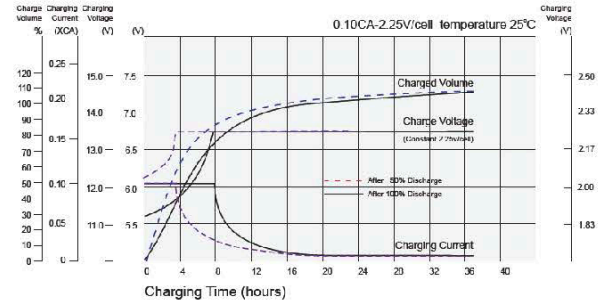
### Model: S 4501



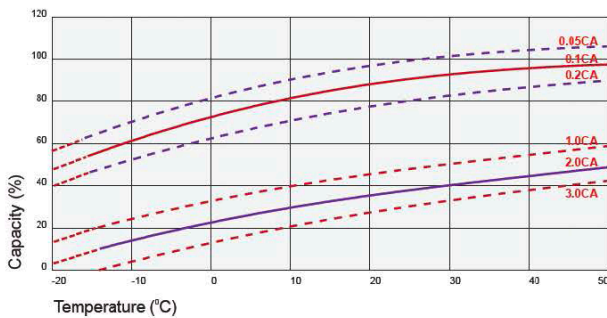
#### Battery Discharge Characteristics (25°C/77°F)



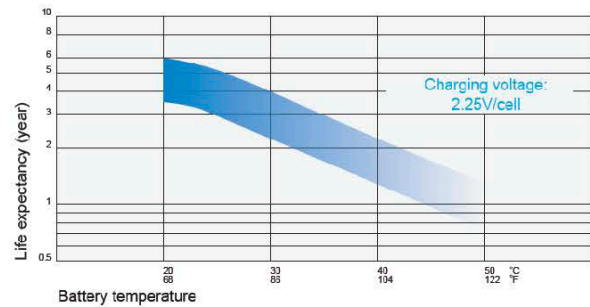
#### Battery Charge Characteristic for standby use



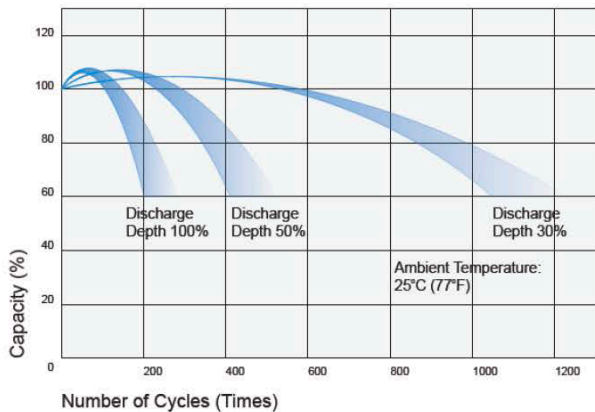
#### Temperature Effects in Relation to Battery Capacity



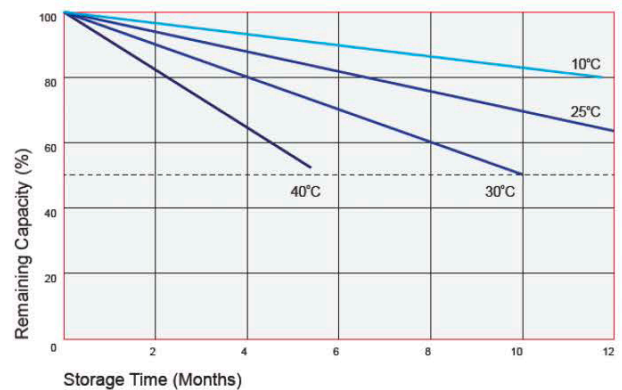
#### Temperature Effects on Long Term Float Life



#### 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~(A)	(A)>1.0C
		<0.5C	<1.0C	