

# SPA 12 - 5 | VRLA Battery



## Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	10 years	
Dimensions	Length	90 mm
	Width	70 mm
	Height	101 mm
	Total Height	107 mm
Approx. Weight	1.45 kg	
Nominal Capacity (25°C)	20 hours rate (0.25 A, 10.5 V)	5.00 Ah
	10 hours rate (0.47 A, 10.5 V)	4.70 Ah
	5 hours rate (0.85 A, 10.5 V)	4.25 Ah
	1 hour rate (3.21 A, 9.6 V)	3.21 Ah
Max. Discharge Current (25°C)	75 A (5s)	
Max. Charging Current (25°C)	1.58 A	
Internal Resistance	26 mOhms	
Fully Charged battery (25°C)		
Self-Discharge (25°C)	3% of capacity declined per month (average)	
	Discharge	-15~50°C
	Charge	-10~50°C
Operating Temperature Range	Storage : -20~50°C	
Short Circuit Current	450 A	
Charging Characteristics (25°C)	Boost charging voltage	2.40-2.45 Vpc
	Temperature compensation	-30 mV/°C
	Float charging voltage	2.25-2.30 Vpc
	Temperature compensation	-18 mV/°C

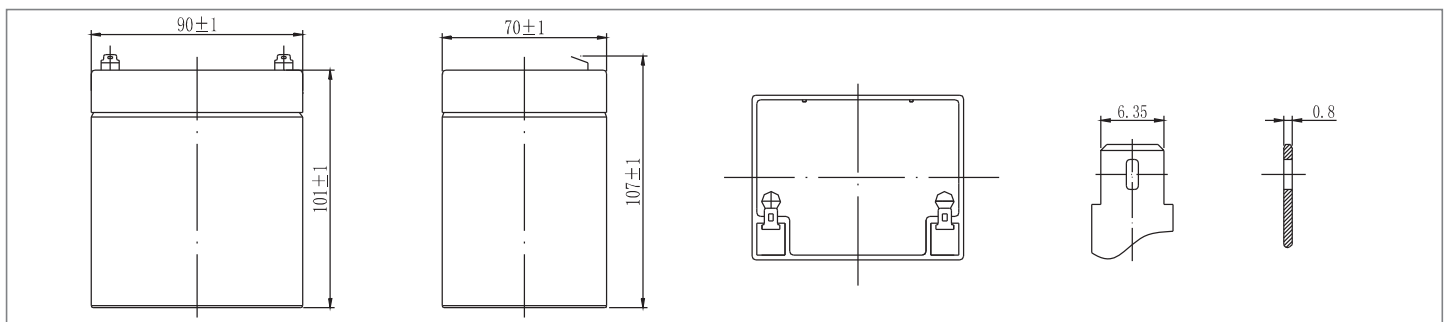
## Applications

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system

## Battery Construction

Component	Positive Plate	Negative Plate	Container	Cover	Safety Valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

## Dimensions



## Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	10 h	20 h
1.60 V	18.5	11.9	9.45	5.24	3.21	1.78	1.28	1.02	0.87	0.47	0.25
1.65 V	18.1	11.1	9.22	5.12	3.18	1.77	1.27	1.01	0.86	0.47	0.25
1.70 V	17.1	11.0	8.91	5.00	3.10	1.75	1.26	1.01	0.86	0.47	0.25
1.75 V	16.2	10.4	8.60	4.88	3.01	1.72	1.25	1.00	0.85	0.47	0.25
1.80 V	15.7	9.80	8.13	4.69	2.92	1.68	1.21	0.97	0.82	0.46	0.25

## Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	10 h	20 h
1.60 V	210	131	101	60.1	37.1	20.8	15.1	12.1	10.4	5.66	3.05
1.65 V	200	128	100	59.0	36.2	20.7	15.1	12.1	10.3	5.64	3.03
1.70 V	191	121	99.5	57.2	35.4	20.5	15.0	12.0	10.2	5.61	3.02
1.75 V	182	115	96.1	55.9	34.8	20.2	14.9	11.9	10.1	5.58	3.00
1.80 V	170	109	91.5	53.5	33.1	19.7	14.4	11.6	9.84	5.47	2.94

(Note) The above characteristics data are average values obtained within three charge/discharge cycles.