



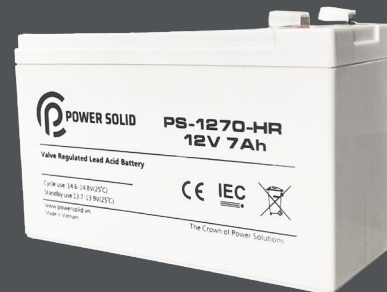
POWER SOLID

The Crown of Power Solution

Power Solid Battery
PS-1270-HR
12V,7Ah

General Features

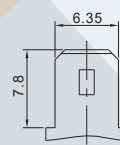
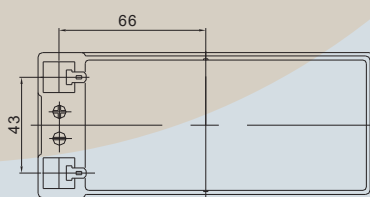
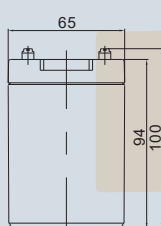
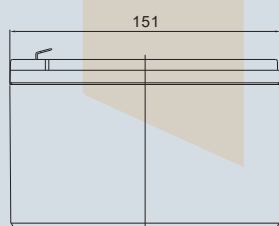
HR (High Rate) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 8 years design life in float service. By using strong grids, thick plate and specially designed active material. It is with lower I.R, lower self discharge rate, high power, and longer service life. The HR series battery offers 30% more power output than the standard series. It is suitable for high power standby used, such as datacenter, UPS, EPS etc.



Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	32W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 2.35Kg (Tolerance±5%)
Internal Resistance	≤ 22.0 mΩ (Full Charge Condition @25°C)
Terminal	Default F2
Max. Discharge Current	80A (5 sec)
Short Circuit Current	440A
Design Life	8 years
Max. Charging Current	2.4 A
Reference Capacity	C ₁₀ 7.5Ah C ₂₀ 8.0Ah
Standby Use Voltage	13.7 V~13.9 V @ 25°C Temperature Compensation: -3mV/°C/ Cell
Cycle Use Voltage	14.6 V~14.8 V @ 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	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.

Dimensions



F2 Terminal

Length	151±1mm (5.94 inches)
Width	65±1mm (2.56 inches)
Height	94±1mm (3.70 inches)
Total Height	100±1mm (3.94 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

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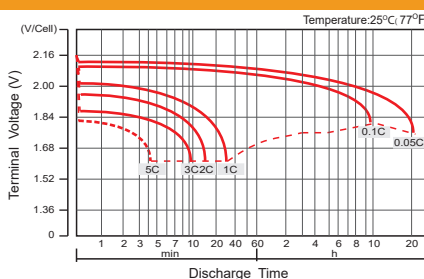
Constant Current Discharge Characteristics : A (25 °C)

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	41.73	36.68	29.31	25.12	18.53	14.57	10.38	5.821	4.126
1.67V	37.87	33.28	26.80	23.16	17.33	13.75	9.835	5.548	3.949
1.70V	36.23	31.85	25.73	22.32	16.80	13.38	9.592	5.427	3.876
1.75V	33.56	29.50	23.97	20.91	15.87	12.72	9.191	5.245	3.758
1.80V	30.74	27.02	22.16	19.51	15.07	12.12	8.790	5.048	3.625
1.85V	26.28	23.10	18.88	16.56	12.92	10.52	7.773	4.563	3.316

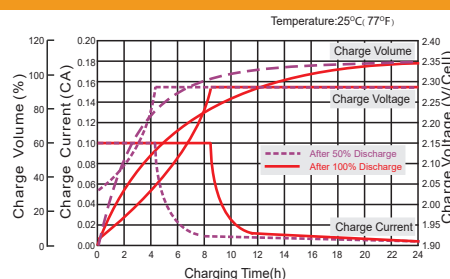
Constant Power Discharge Characteristics : W/Cell (25°C)

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	74.99	65.92	52.85	45.47	33.87	26.82	19.18	10.91	7.811
1.67V	68.90	60.56	48.99	42.53	32.00	25.59	18.47	10.50	7.545
1.70V	66.52	58.48	47.41	41.26	31.33	25.05	18.04	10.34	7.427
1.75V	62.22	54.69	44.67	39.16	29.87	24.10	17.47	10.05	7.236
1.80V	57.76	50.77	41.79	36.91	28.53	23.14	16.89	9.762	7.044
1.85V	50.19	44.12	36.11	31.72	24.80	20.28	15.03	8.883	6.469

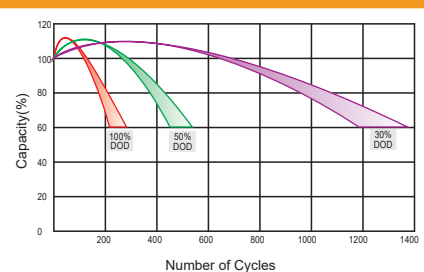
Discharge Characteristics Curve



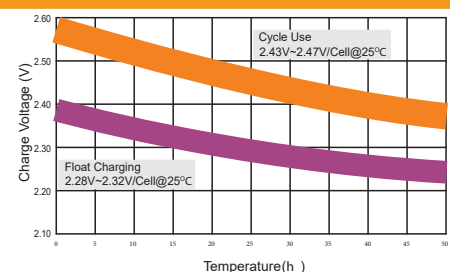
Charge Characteristic Curve For Standby Use(IU)



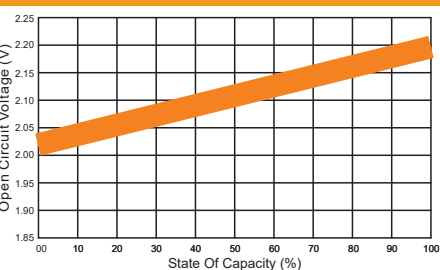
Cycle Life In Relation To Depth Of Discharge



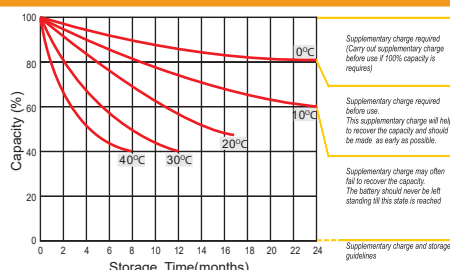
Relationship Between Charging Voltage And Temperature



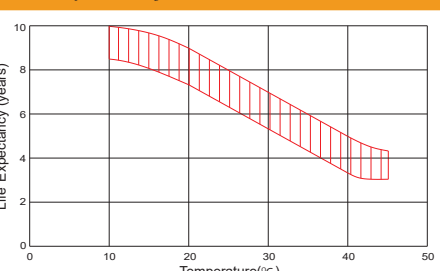
Relationship of OCV And State of Charge(20°C)



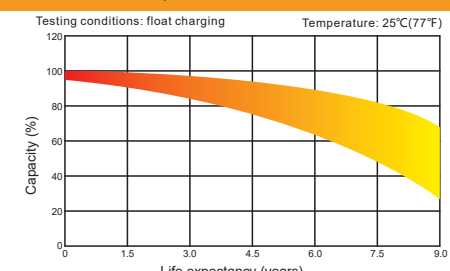
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



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