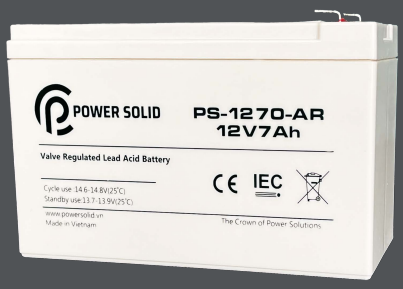
POWER SOLID

The Crown of Power Solution

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

General Features

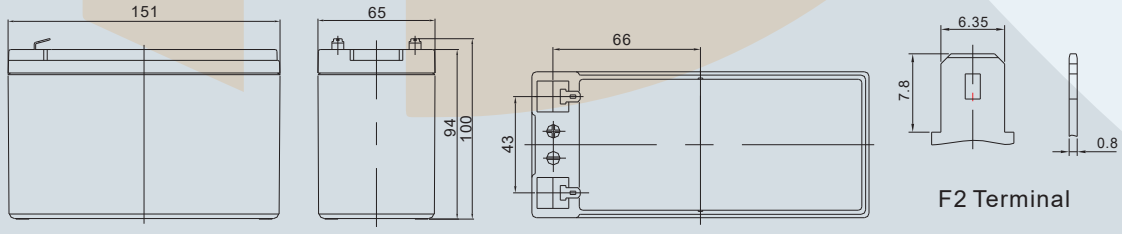
series is a general purpose battery with 6~8 years design life in float service. It meets with IEC, JIS, BS ,GB/T and YD/T standards. With advanced AGM valve regulated technology and high purity raw material, the series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPS, medical equipment, emergency light and security system applications.



Specification

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	7Ah@20hour-rate to 1.75V per cell @25℃
Weight	Approx. 1.95 Kg (Tolerance±5.0%)
Internal Resistance	≤ 32 mΩ (Full Charge Condition @25℃)
Terminal	Default F2,F1 Optional
Max. Discharge Current	70A (5 sec)
Short Circuit Current	350A
Design Life	6~8 years
Max. Charging Current	2.1 A
Reference Capacity	C_3 5.25Ah C_5 5.95Ah C_{10} 6.54Ah C_{20} 7.00Ah
Standby Use Voltage	13.7 V~13.9 V @ 25℃ Temperature Compensation: -3mV/℃/ Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/ Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



Length	151±1.5mm (5.94 inches)
Width	65±1.5mm (2.56 inches)
Height	94±1.5mm (3.70 inches)
Total Height	100±1.5mm (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℃)

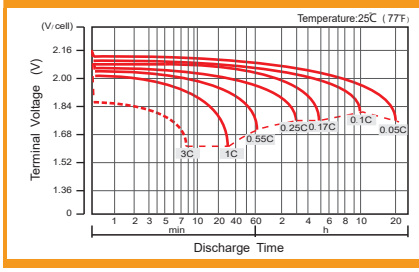
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	26.56	18.77	13.57	7.793	4.277	2.626	1.974	1.594	1.320	0.850	0.690	0.364
1.65V	24.70	17.74	12.97	7.482	4.130	2.542	1.913	1.551	1.286	0.840	0.682	0.359
1.70V	22.28	16.33	12.15	7.151	3.996	2.458	1.861	1.508	1.253	0.827	0.672	0.354
1.75V	19.96	14.95	11.31	6.835	3.850	2.372	1.806	1.470	1.221	0.816	0.663	0.350
1.80V	17.53	13.53	10.44	6.533	3.703	2.288	1.750	1.428	1.190	0.802	0.654	0.347
1.85V	13.91	11.06	8.663	5.627	3.321	2.096	1.618	1.327	1.109	0.753	0.616	0.329

Constant Power Discharge Characteristics : W/Cell (25℃)

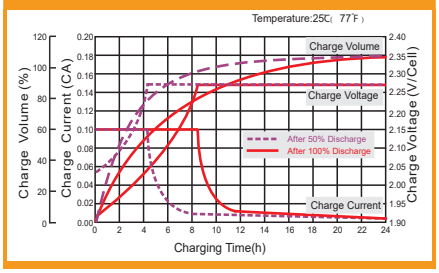
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	44.03	31.91	23.72	14.15	8.037	4.977	3.770	3.060	2.545	1.660	1.357	0.718
1.65V	41.42	30.73	23.01	13.73	7.806	4.841	3.669	2.988	2.489	1.645	1.342	0.707
1.70V	38.22	28.81	21.88	13.26	7.599	4.708	3.585	2.918	2.432	1.623	1.324	0.700
1.75V	35.00	26.85	20.65	12.80	7.366	4.564	3.493	2.854	2.379	1.604	1.308	0.692
1.80V	31.39	24.73	19.34	12.36	7.125	4.423	3.398	2.782	2.326	1.580	1.293	0.686
1.85V	25.44	20.57	16.28	10.75	6.430	4.075	3.156	2.595	2.176	1.487	1.219	0.652

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.
The battery must be fully charged before the capacity test. The C_{20} should reach 95% after the first cycle and 100% after the third cycle.

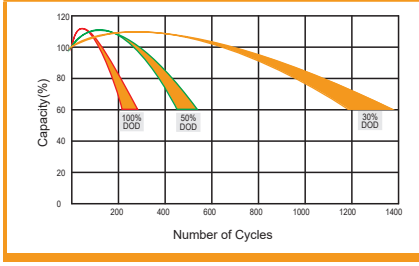
Discharge Characteristics Curve



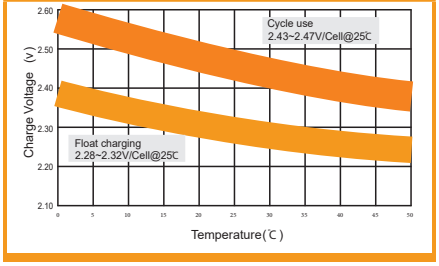
Charge Characteristic Curve For Standby Use(IU)



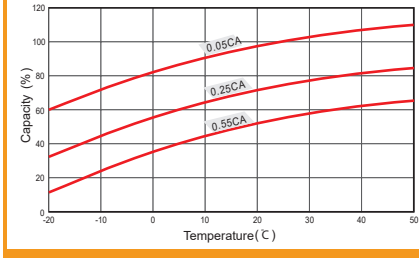
Cycle Life In Relation To Depth Of Discharge



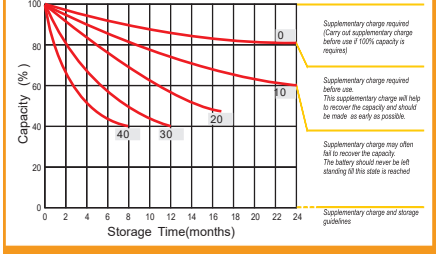
Relationship Between Charging Voltage And Temperature



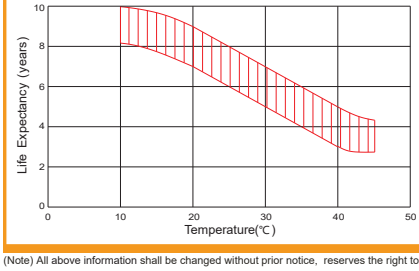
Temperature Effects On Capacity



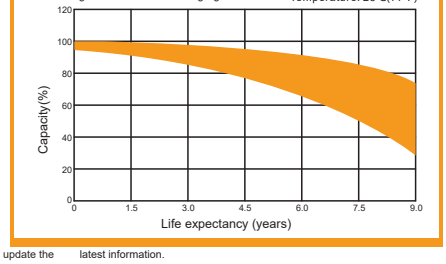
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, reserves the right to explain and update the latest information.