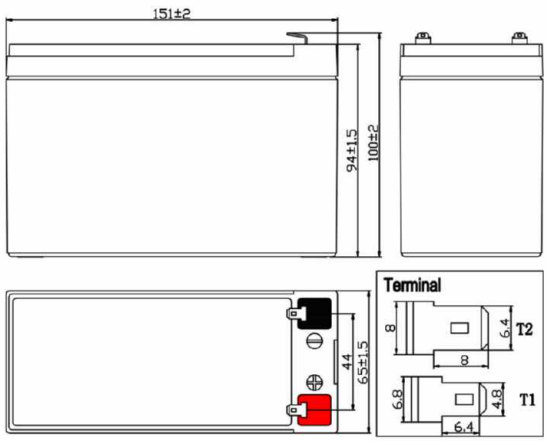
PS7.5-12 (12V7.5Ah)

Specification

Nominal Voltage (V)	12V (6 cells in series)	
Rated Capacity	7.5Ah	(C_{20},1.75V/cell)
Dimensions(mm)	Length	151 ± 2 mm
	Width	65 ± 1.5 mm
	Height	94 ± 1.5 mm
	Total Height	100 ± 2 mm
Nominal Capacity @25℃ (Ah)	20 Hour rate (0.379A to 10.5 volts)	7.58Ah
	10 Hour rate (0.724A to 10.5 volts)	7.24Ah
	5 Hour rate (1.294A to 10.5 volts)	6.47Ah
	1 Hour rate (4.875A to 9.6 volts)	4.87Ah
	15 min-rate (15.63A to 9.6 volts)	3.90Ah
Approx. Weight	2.18 kg	
Terminal	T1/T2	
Max.Discharge Current	112.5A @25℃ (5s)	
Internal Resistance	19mΩ @25℃ (Full Charged Battery)	
Floating Design Life	5 years @25℃	
Ambient Temperature	Charge：-15℃~50℃ Discharge：-20℃~60℃ Storage：-20℃~50℃	
Container Material	A.B.S , UL94-HB , UL94-V0 , Optional	
Self Discharge	VRLA batteries can be stored for more than 6 months at 25℃. Self-Discharge ratio less than 3% per month at 25℃. Please charge batteries before using.	





Certification

Constant Current Discharge Characteristics (A), (25°C)

F.V/TIME	5min	8min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	30.07	23.03	20.80	15.63	8.544	4.875	2.747	1.961	1.323	0.876	0.750	0.401
1.67V/cell	29.10	22.37	19.90	15.14	8.450	4.826	2.726	1.946	1.313	0.869	0.743	0.396
1.70V/cell	28.55	21.70	19.30	14.64	8.355	4.766	2.704	1.913	1.304	0.863	0.731	0.387
1.75V/cell	27.41	20.66	18.50	14.13	8.110	4.706	2.681	1.894	1.294	0.855	0.724	0.379
1.80V/cell	26.24	19.69	17.50	13.55	7.767	4.639	2.659	1.871	1.279	0.844	0.713	0.364

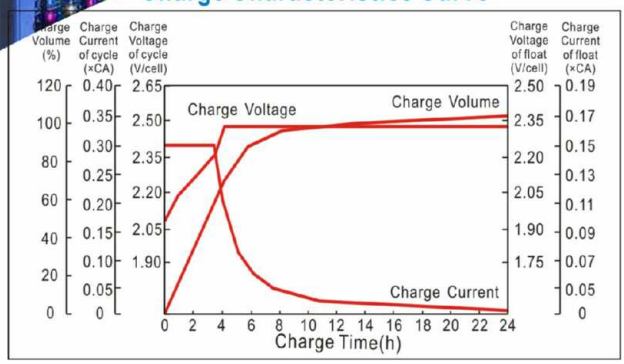
Constant Wattage Discharge Characteristics (Watt), (25°C)

F.V/TIME	5min	8min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	55.12	42.99	39.35	26.90	16.73	9.669	5.447	3.909	2.639	1.748	1.498	0.803
1.67V/cell	53.59	41.94	37.81	26.00	16.58	9.588	5.416	3.883	2.620	1.734	1.484	0.793
1.70V/cell	52.82	40.87	36.83	25.15	16.40	9.493	5.385	3.819	2.603	1.722	1.463	0.775
1.75V/cell	51.16	39.26	35.61	24.28	15.94	9.381	5.345	3.784	2.585	1.709	1.449	0.761
1.80V/cell	49.41	37.74	33.98	23.18	15.27	9.254	5.304	3.743	2.558	1.688	1.426	0.731

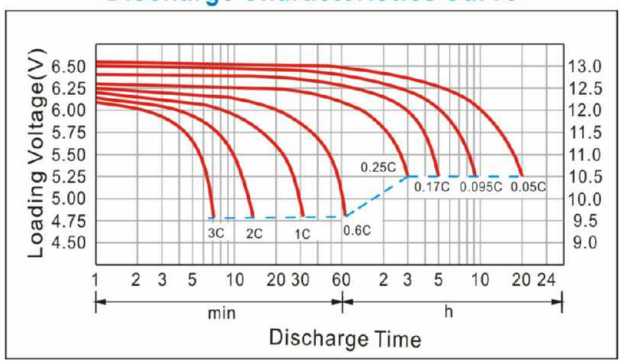
POWER KINGDOM®

PS7.5-12 (12V7.5Ah)

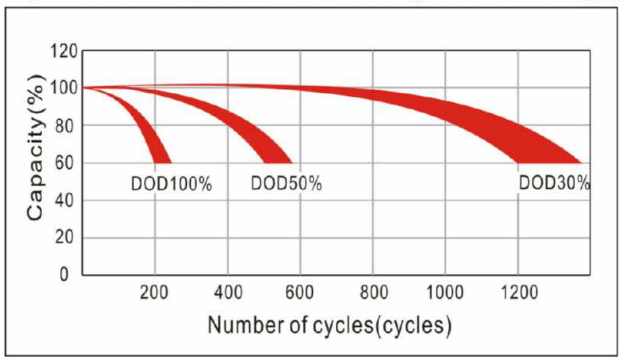
Charge Characteristics Curve



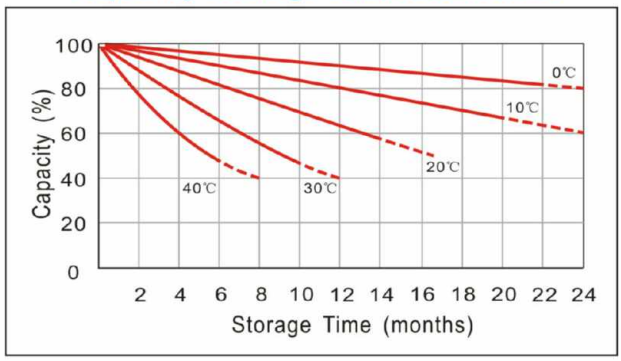
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



Capacity Factors with Different Temperature

Battery type		–20℃	–10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Maintenance & Cautions

☑ Charging Procedure:

Application	Charging method	Charge voltage at 25℃	Temperature compensation coefficient of charging voltage	Max.charging current	Temperature
For standby power source	Constant voltage charging (With current restriction)	2.25~2.30 V/cell	–3mV/℃/cell	0.2CA	–15~50℃
For cycle service		2.45~2.50 V/cell	–4mV/℃/cell	0.3CA	

☑ Every month, recommend inspection every battery voltage.

☑ Every three months, recommend equalization charge for one time.Equalization charge method:

Step 1:Discharge: 100% rate capacity discharge.

Step 2:Charge: Max. Current 0.3CA, constant voltage 2.45–2.50V/Cell charge 24h.

☑ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.

☑ Charge the batteries at least once every six months, if they are stored at 25℃.Charging Method:

Constant Voltage : –0.2C × 2h+2.4~2.45V/cell × 24h , Max. Current 0.25CA

Constant Current : –0.2C × 2h+0.1C × 12h

Fast : –0.2C × 2h+0.3C × 4h

☑ Terminal of torque:

Bolt	M5	M6	M8
Terminal	T3、T10	T4、T7、T11、T12、T13	T5、T6、T8、T9、T14
Torque	6~7N.m	8~10N.m	10~12N.m

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