



SA12-20

(12Volt 20Ah(C20))

General Features

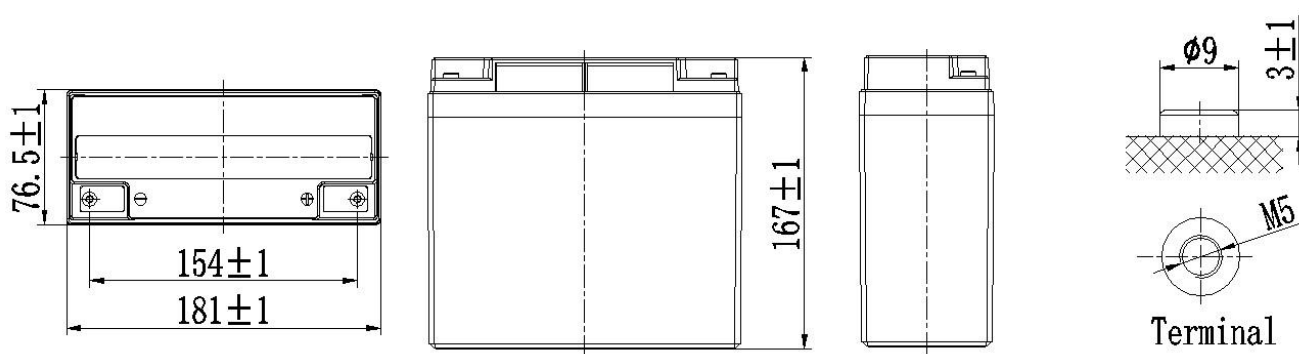
- High corrosion resistant performance: Pb-Ca multi-alloy grid
- High energy density and power density
- Optimized capability of instant high-current discharging
- Excellent charge acceptance ability
- Excellent deep cycle discharge capability
- Strong high and low temperature performance
- Precision sealing technology



UN2800 Non-spillable battery

Dimension:181(L)×77(W) ×167.5(H)×167.5(TH)

Unit: mm



Specification	
Nominal Voltage	12V
Nominal Capacity	20.0Ah
Design life	5 years
Terminal	M5
Approx. Weight	Approx5.10kg (11.24lbs)
Container Material	ABS
short-circuit current	645A
Internal resistance(Full charged at 25°C:)	18.6 mΩ
Self discharge	3% of capacity declined per month at 25°C
Operating Temperature	
Discharge:	-20 ~50°C(-4~ 122°F)
Charge :	-20 ~50°C(-4~ 122°F)
Storage:	-20 ~50°C(-4~ 122°F)
Charge Method(25 °C)	
Charge current:	Max. 5.0A;Recom.2.0A
Float charge:13.5-13.8V	recom.13.8V(-18mV/ °C)
Equalize charge:13.8-14.1V	recom.14.1V(-24mV/ °C)
Cycle charge:14.4-15.0V	recom.14.7V(-30mV/ °C)

Standards

Executive standard GB/T 19639.1-2014

Applications

- UPS/EPS
- Power systems
- Telecommunications system
- Emergency lighting、Auto control system
- Solar/wind generating storage cyclic
- Other general purpose

Rated Capacity

20Hour Rate (1.00A to 10.5V)	20.0Ah
3Hour Rate (5.1A to 10.2V)	15.3Ah
1Hour Rate (12.16A to 9.6V)	12.16Ah

Attain Certificate

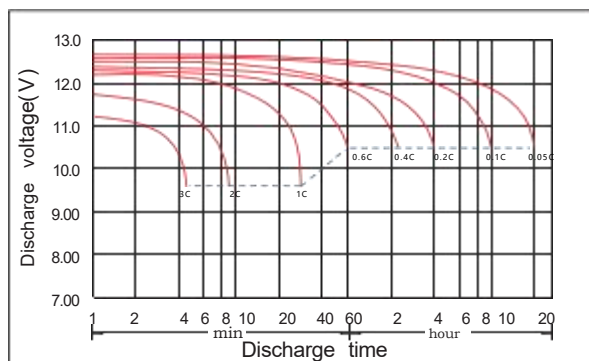




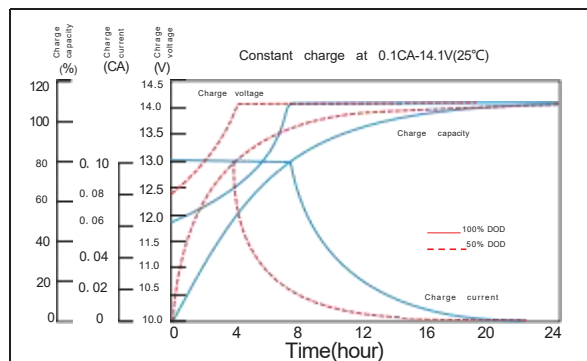
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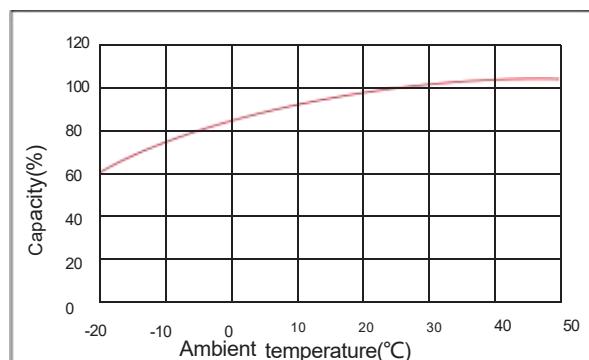
Discharge characteristic



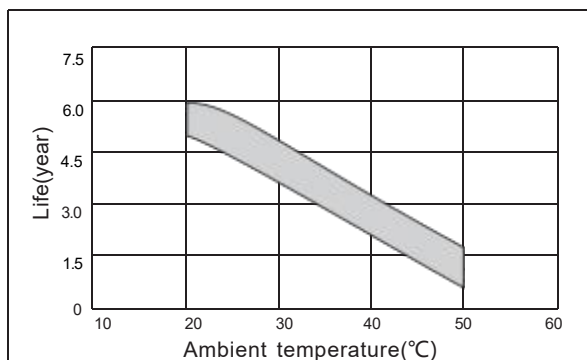
Charging characteristic



The effect of temperature on capacity



The effect of temperature on float life



Constant Current Discharge Characteristics Unit:A (25°C,77°F)

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	65.63	44.62	34.24	21.10	15.35	12.16	8.849	7.261	5.471	4.408	3.704	3.170	2.398	1.965	1.037
1.65V	61.98	42.84	32.73	20.26	14.81	11.74	8.546	7.030	5.302	4.289	3.608	3.103	2.371	1.941	1.020
1.70V	56.49	40.05	30.66	19.36	14.30	11.36	8.268	6.798	5.100	4.172	3.514	3.002	2.334	1.912	1.009
1.75V	51.12	37.80	29.57	18.51	13.80	10.95	7.926	6.561	5.004	4.065	3.425	2.912	2.302	1.887	1.000
1.80V	44.89	34.22	27.30	17.69	13.33	10.53	7.700	6.378	4.850	3.949	3.337	2.809	2.263	1.857	0.986
1.85V	40.26	30.45	24.62	16.04	11.59	9.443	6.975	5.914	4.575	3.670	3.112	2.671	2.124	1.754	0.928

Constant Power Discharge Characteristics Unit: W/cell (25°C ,77°F)

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	108.8	75.84	59.86	38.33	28.60	22.85	16.72	13.76	10.45	8.463	7.139	6.140	4.683	3.863	2.041
1.65V	103.9	74.22	58.07	37.18	27.74	22.20	16.15	13.39	10.17	8.264	6.980	5.933	4.640	3.821	2.012
1.70V	96.88	70.67	55.20	35.90	27.10	21.61	15.70	13.02	9.838	8.070	6.822	5.784	4.579	3.769	1.991
1.75V	89.63	67.89	54.01	34.66	26.25	20.95	15.17	12.62	9.682	7.893	6.674	5.656	4.524	3.724	1.977
1.80V	80.37	62.53	50.58	33.46	25.36	20.26	14.74	12.33	9.419	7.694	6.524	5.554	4.458	3.670	1.951
1.85V	73.60	57.79	46.27	30.64	22.80	18.28	13.71	11.50	8.925	7.179	6.104	5.277	4.195	3.470	1.839