

SM12-7.2

SM lead-acid battery



Applications

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

Specification

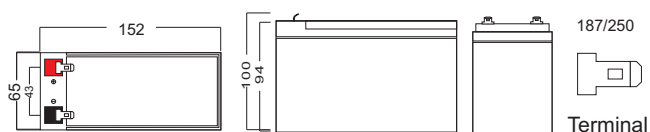
Nominal Voltage	12V
Nominal Capacity	7.2Ah
Design life	5 years
Terminal	187/250
Approx. Weight	Approx 2.1kg
Container Material	ABS
Rated Capacity	7.20Ah 20Hour Rate (0.36A to 10.5V)
	5.58Ah 3Hour Rate (1.86A to 10.5V)
	4.75Ah 1Hour Rate (4.75A to 9.60V)
Internal resistance	Full charged at 25°C: 25.0 mΩ
Max. Discharge Current	108A(5S)
Operating Temperature	Discharge: -20 ~50°C(-4~ 122°F)
	Charge: -20 ~50 °C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge current:	Max.1.80A ; Recom.0.72A
Charge Method (25 °C)	Float Charge: 13.5-13.8V,recom.13.5V(-18mV/ °C)
	Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)
	Cycle charge:14.4-15.0V,recom.14.4V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

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



Dimension: 152(L)×65(W) ×94(H) ×100(TH) Unit: mm



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

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	28.5	18.6	13.9	9.11	4.75	2.72	1.99	1.59	1.35	0.893	0.713	0.382
1.65V	28.3	17.9	12.7	8.65	4.46	2.61	1.93	1.54	1.32	0.878	0.706	0.374
1.70V	23.2	16.8	11.9	8.38	4.32	2.56	1.89	1.46	1.31	0.864	0.691	0.367
1.75V	21.5	16.0	11.1	8.19	4.17	2.50	1.86	1.44	1.25	0.842	0.677	0.360
1.80V	19.8	15.0	10.3	7.92	4.02	2.43	1.76	1.41	1.20	0.821	0.662	0.346

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

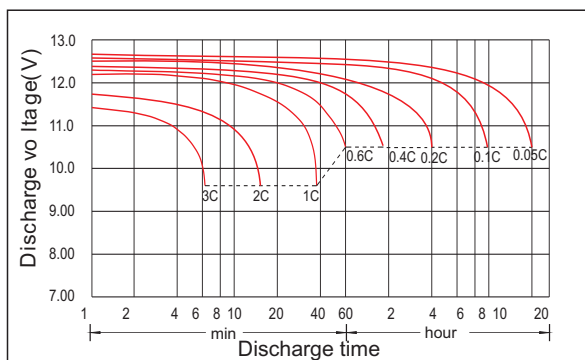
FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	53.5	33.6	25.4	15.4	8.71	5.10	3.76	3.01	2.56	1.68	1.38	0.756
1.65V	49.3	31.8	23.9	15.3	8.20	4.91	3.65	2.92	2.51	1.66	1.35	0.736
1.70V	45.1	30.8	22.8	15.2	7.94	4.81	3.59	2.77	2.44	1.64	1.34	0.730
1.75V	40.9	29.9	22.0	15.1	7.72	4.70	3.54	2.74	2.39	1.58	1.31	0.714
1.80V	36.7	28.9	21.0	15.0	7.61	4.67	3.44	2.71	2.33	1.52	1.29	0.709

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

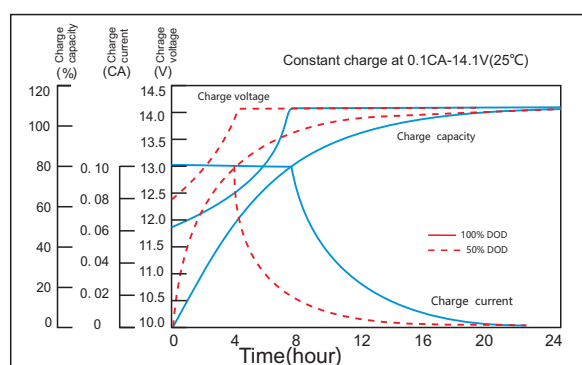
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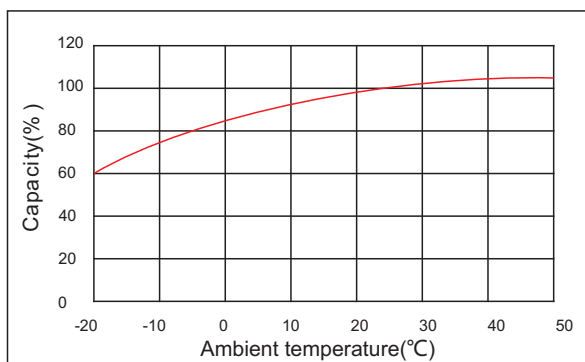
Discharge characteristic



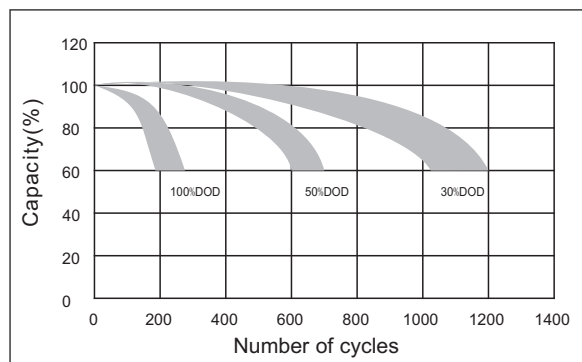
Charging characteristic



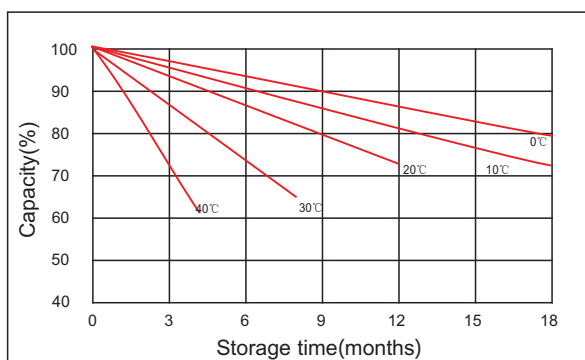
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

