

SM Solar

SM12-100HT

VRLA SEALED GEL Battery (12v 100Ah)



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	100Ah
Design life	12 years
Terminal	M8
Approx. Weight	Approx 29.5kg
Container Material	ABS
Rated Capacity	100Ah 10Hour Rate (10.0A to 10.8V)
	80.7Ah 3Hour Rate (26.9A to 10.8V)
	65.5Ah 1Hour Rate (65.5A to 10.5V)
Internal resistance	Full charged at 25°C: 5.0 mΩ
Max. Discharge Current	1200A(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. 25A ; Recom.10A

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

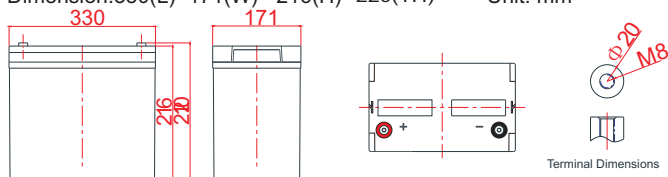
General Features

- › 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
- › Long life



Dimension:330(L)×171(W)×216(H)×220(TH)

Unit: mm



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

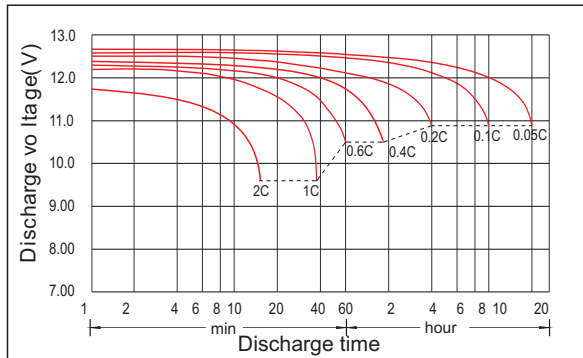
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	352	189	115	67.3	38.6	28.0	18.8	12.4	10.4	5.46
1.65V	342	184	113	66.9	38.4	27.7	18.6	12.3	10.3	5.43
1.70V	328	180	111	66.4	38.1	27.3	18.4	12.2	10.2	5.40
1.75V	302	174	110	65.5	37.5	27.0	18.2	12.1	10.1	5.38
1.80V	270	162	105	63.8	36.8	26.9	17.7	12.0	10.0	5.35
1.85V	241	144	96.2	59.1	35.0	25.3	16.9	11.5	9.70	5.26

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

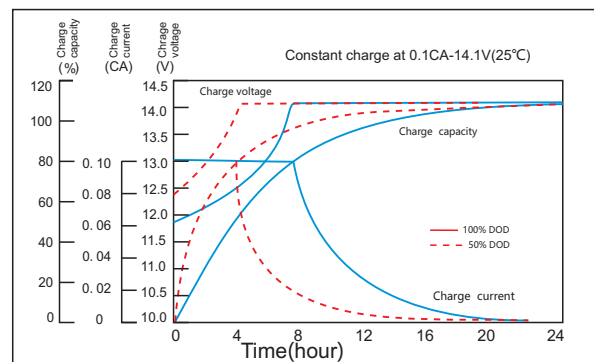
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	591	333	208	127	73.0	53.3	35.7	24.0	20.0	10.8
1.65V	568	328	206	126	72.8	52.6	35.5	23.8	19.8	10.8
1.70V	565	324	206	125	72.5	52.3	35.2	23.7	19.6	10.7
1.75V	527	322	205	124	72.1	52.0	35.0	23.5	19.4	10.7
1.80V	484	304	201	123	71.9	51.8	34.6	23.3	19.2	10.6
1.85V	432	272	184	115	68.7	49.3	33.0	22.5	18.9	10.5

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.

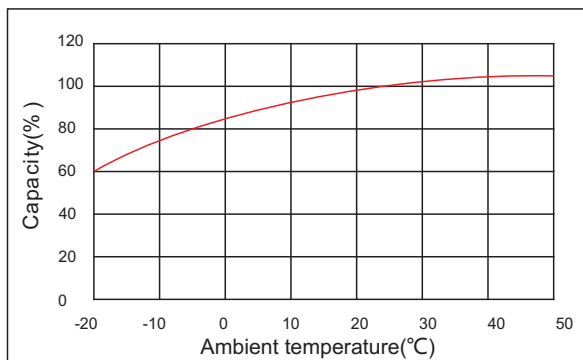
Discharge characteristic



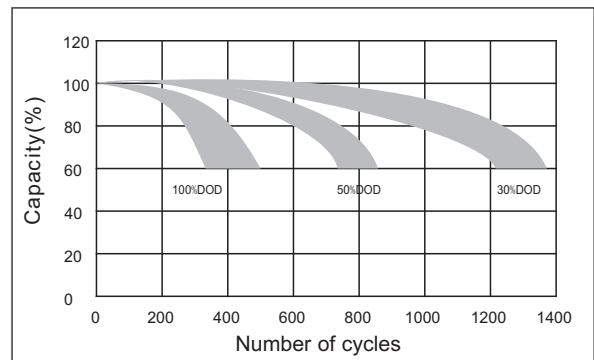
Charging characteristic



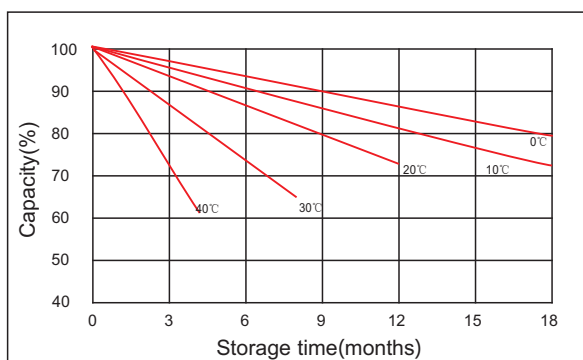
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

