

SM Solar

SM12-80

VRLA AGM SEALED LEAD ACID Battery (12v 80Ah)

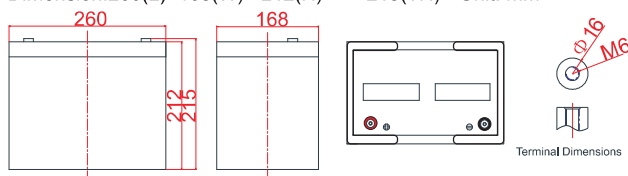


General Features

- 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: 260(L) × 168(W) × 212(H) × 215(TH) Unit: mm



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	80Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx 23.0kg
Container Material	ABS
Rated Capacity	80.0Ah 10Hour Rate (8.00A to 10.8V)
	56.4Ah 3Hour Rate (18.8A to 10.8V)
	45.8Ah 1Hour Rate (45.8A to 10.5V)
Internal resistance	Full charged at 25°C: 6.6 mΩ
Max. Discharge Current	960A(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. 20.0A ; Recom.8.0A
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

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

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	282	151	92.1	53.9	30.9	22.4	15.1	9.88	8.32	4.37
1.65V	273	147	90.6	53.5	30.7	22.2	14.9	9.80	8.24	4.34
1.70V	262	144	89.0	53.2	30.5	21.9	14.7	9.72	8.16	4.32
1.75V	241	139	88.2	52.4	30.0	21.6	14.6	9.64	8.08	4.30
1.80V	216	130	84.4	51.0	29.5	21.5	14.2	9.56	8.00	4.28
1.85V	193	116	77.0	47.3	28.0	20.2	13.5	9.17	7.76	4.21

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	473	267	167	102	58.4	42.6	28.5	19.2	16.0	8.64
1.65V	455	262	165	101	58.3	42.1	28.4	19.0	15.8	8.60
1.70V	452	259	165	100	58.0	41.9	28.1	19.0	15.7	8.56
1.75V	422	257	164	99.5	57.7	41.6	28.0	18.8	15.5	8.52
1.80V	387	243	160	98.7	57.5	41.5	27.7	18.7	15.4	8.48
1.85V	346	217	147	91.6	55.0	39.4	26.4	18.0	15.1	8.40

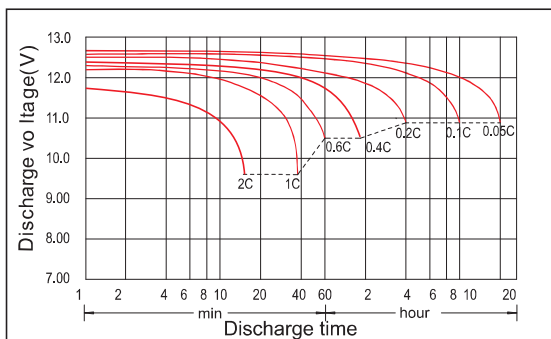
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

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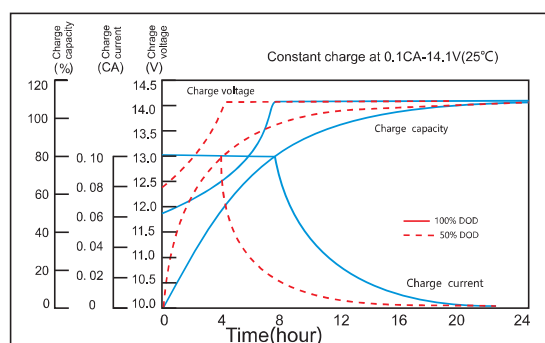
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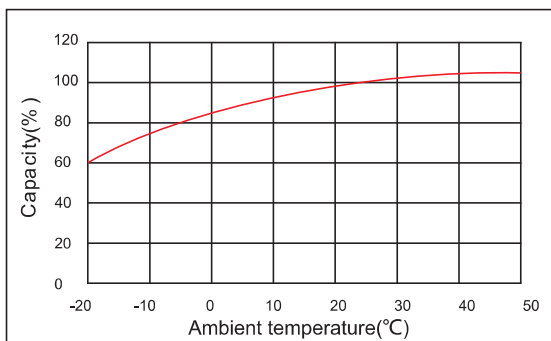
Discharge characteristic



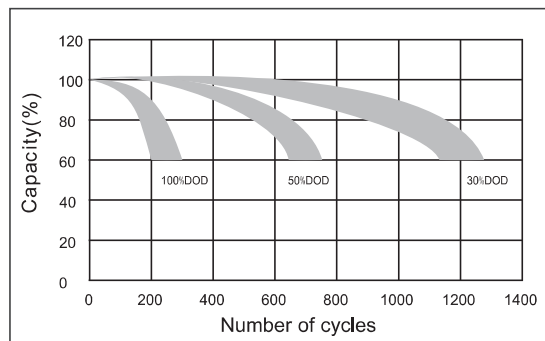
Charging characteristic



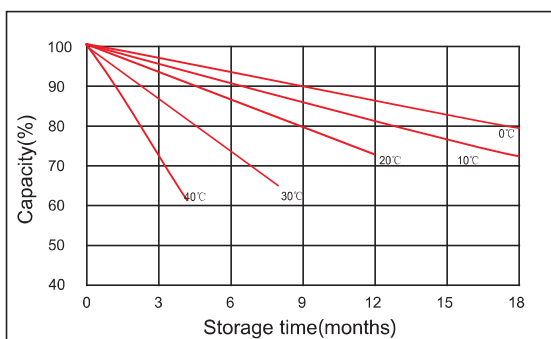
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

