

JM12-50 (12V50AH/10HR)

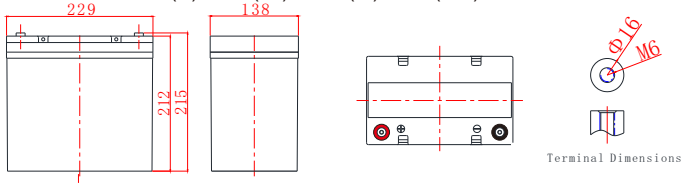


General Features

- > 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: 229(L)×138(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	50Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx 15.5kg (34.2lbs)
Container Material	ABS
Rated Capacity	50.0Ah 10Hour Rate (5.00A to 10.8V)
	40.2Ah 3Hour Rate (13.4A to 10.8V)
	32.7Ah 1Hour Rate (32.7A to 10.5V)
Internal resistance	Full charged at 25°C: 10.0 mΩ
Max. Discharge Current	600A(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. 12.5A ; Recom.5.0A
Float Charge voltage(-3mV/°C) :	
Charge Method (25 °C)	13.5-13.8V, recom. 13.5V(Full floating system)
	13.5-13.8V, recom. 13.62V(Cycle use system)
	Equalize charge: 13.8-14.1V, recom. 14.1V(-4mV/°C)
	Cycle charge: 14.4-15.0V, recom. 14.4V(-5mV/°C)
Self discharge	3% of capacity declined per month at 25°C

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

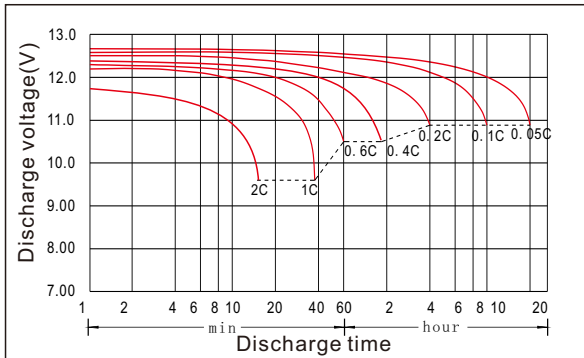
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	176	94.7	57.6	33.7	19.3	14.0	9.41	6.18	5.20	2.73
1.65V	171	91.8	56.6	33.5	19.2	13.9	9.31	6.13	5.15	2.72
1.70V	164	89.8	55.6	33.2	19.1	13.7	9.21	6.08	5.10	2.70
1.75V	151	86.9	55.1	32.7	18.8	13.5	9.11	6.03	5.05	2.69
1.80V	135	81.0	52.7	31.9	18.4	13.4	8.87	5.98	5.00	2.68
1.85V	121	72.2	48.1	29.5	17.5	12.6	8.43	5.73	4.85	2.63

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

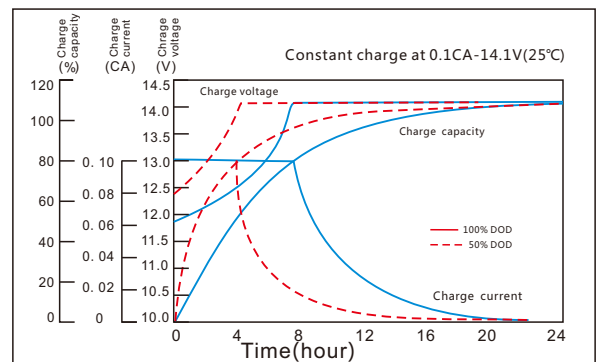
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	295	167	104	63.7	36.5	26.7	17.8	12.0	10.0	5.40
1.65V	284	164	103	63.2	36.4	26.3	17.7	11.9	9.90	5.38
1.70V	283	162	103	62.7	36.3	26.2	17.6	11.9	9.80	5.35
1.75V	264	161	103	62.2	36.1	26.0	17.5	11.8	9.70	5.33
1.80V	242	152	100	61.7	36.0	25.9	17.3	11.7	9.60	5.30
1.85V	216	136	91.9	57.3	34.3	24.6	16.5	11.3	9.45	5.25

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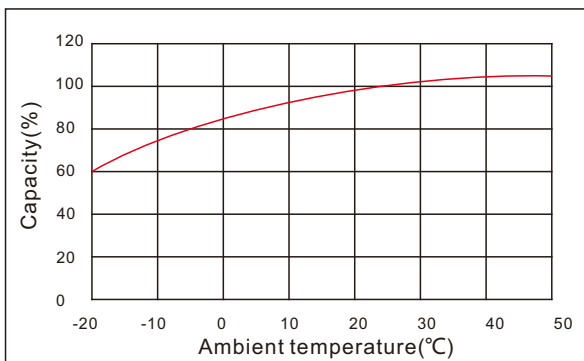
Discharge characteristic



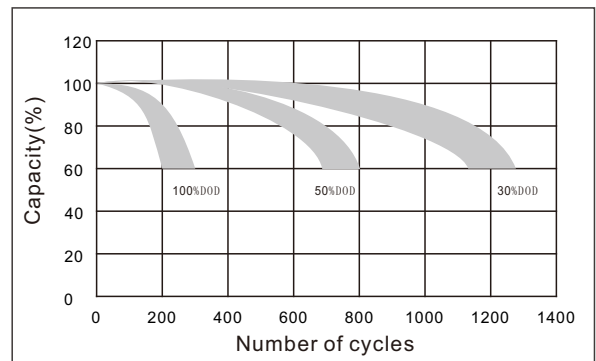
Charging characteristic



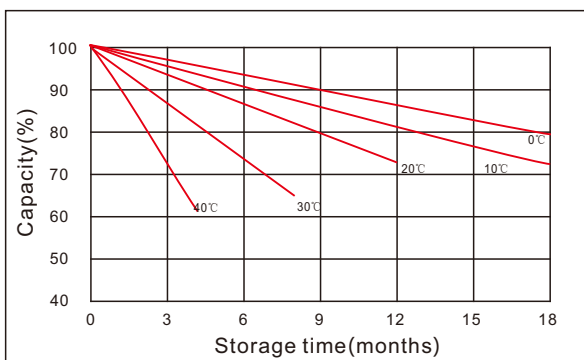
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

