

JM12-50 (12V50AH/10HR)



Applications

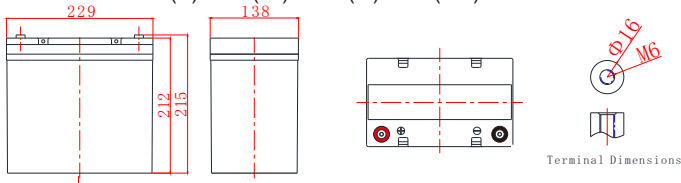
- > UPS/EPS
- > Power systems
- > Telecommunications system
- > Emergency lighting, Auto control system
- > Solar/wind generating storage cyclic
- > Other general purpose

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



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)

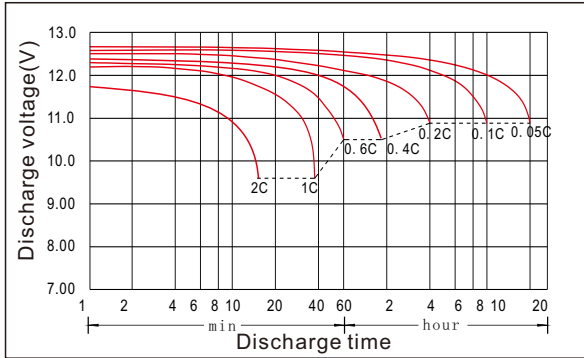
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	176	94.7	57.6	33.7	19.3	14.0	9.41	6.18	5.20	2.73
1.65V	171	91.8	56.6	33.5	19.2	13.9	9.31	6.13	5.15	2.72
1.70V	164	89.8	55.6	33.2	19.1	13.7	9.21	6.08	5.10	2.70
1.75V	151	86.9	55.1	32.7	18.8	13.5	9.11	6.03	5.05	2.69
1.80V	135	81.0	52.7	31.9	18.4	13.4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

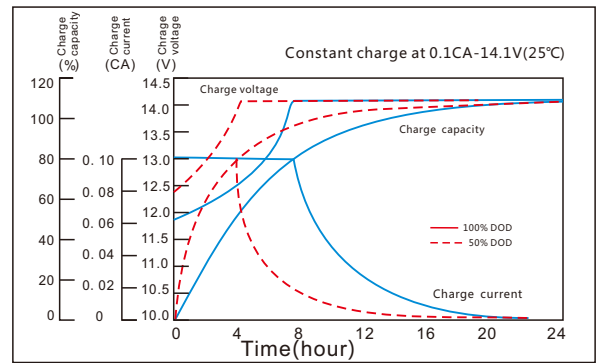
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	295	167	104	63.7	36.5	26.7	17.8	12.0	10.0	5.40
1.65V	284	164	103	63.2	36.4	26.3	17.7	11.9	9.90	5.38
1.70V	283	162	103	62.7	36.3	26.2	17.6	11.9	9.80	5.35
1.75V	264	161	103	62.2	36.1	26.0	17.5	11.8	9.70	5.33
1.80V	242	152	100	61.7	36.0	25.9	17.3	11.7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

JM12-50 (12V50AH/10HR)

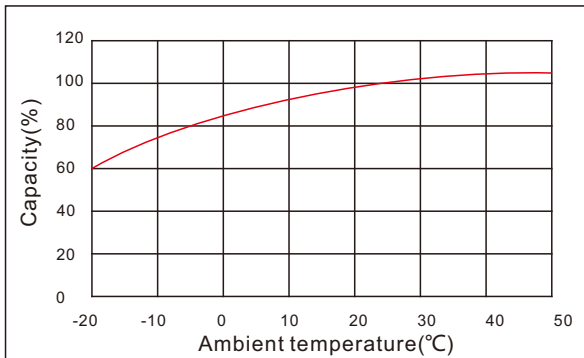
Discharge characteristic



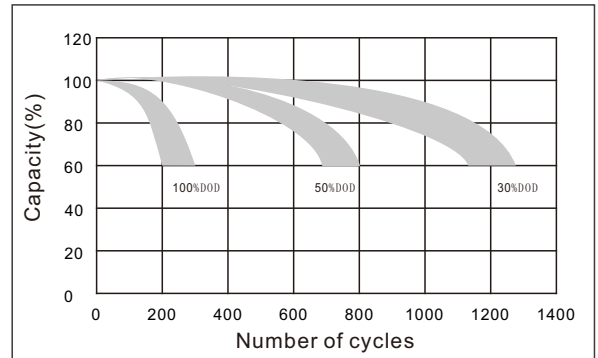
Charging characteristic



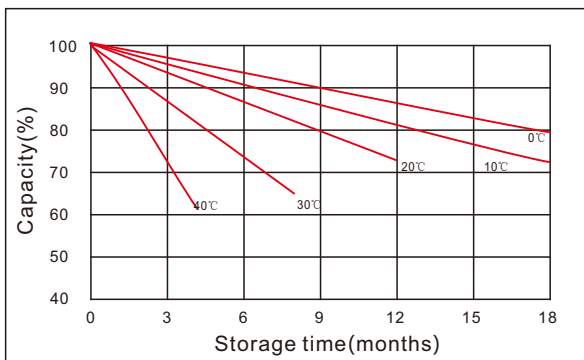
The effect of temperature on capacity



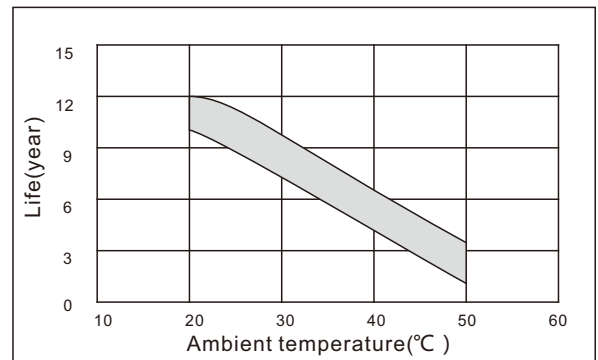
The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life



JM12-100 (12V100AH/10HR)



Applications

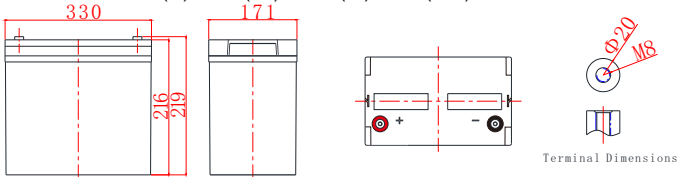
- > UPS/EPS
- > Power systems
- > Telecommunications system
- > Emergency lighting, Auto control system
- > Solar/wind generating storage cyclic
- > Other general purpose

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) × 219(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	100Ah
Design life	10 years
Terminal	M8
Approx. Weight	Approx 28.5kg (62.8lbs)
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
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)

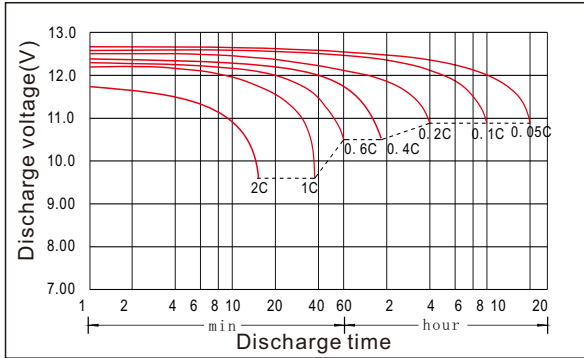
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	352	189	115	67.3	38.6	28.0	18.8	12.4	10.4	5.46
1.65V	342	184	113	66.9	38.4	27.7	18.6	12.3	10.3	5.43
1.70V	328	180	111	66.4	38.1	27.3	18.4	12.2	10.2	5.40
1.75V	302	174	110	65.5	37.5	27.0	18.2	12.1	10.1	5.38
1.80V	270	162	105	63.8	36.8	26.9	17.7	12.0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

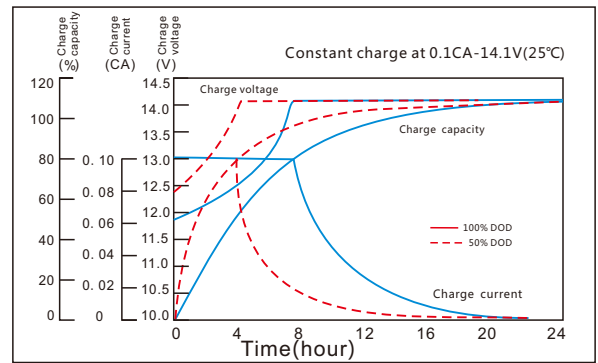
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	591	333	208	127	73.0	53.3	35.7	24.0	20.0	10.8
1.65V	568	328	206	126	72.8	52.6	35.5	23.8	19.8	10.8
1.70V	565	324	206	125	72.5	52.3	35.2	23.7	19.6	10.7
1.75V	527	322	205	124	72.1	52.0	35.0	23.5	19.4	10.7
1.80V	484	304	201	123	71.9	51.8	34.6	23.3	19.2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

JM12-100_(12V100AH/10HR)

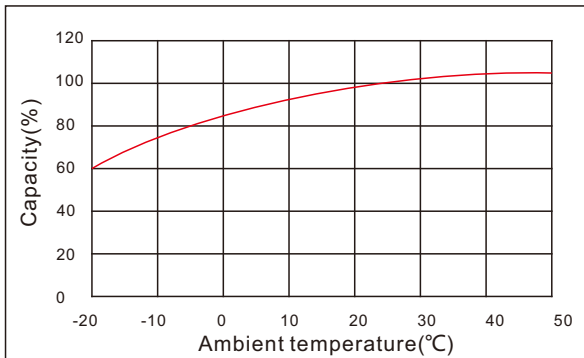
Discharge characteristic



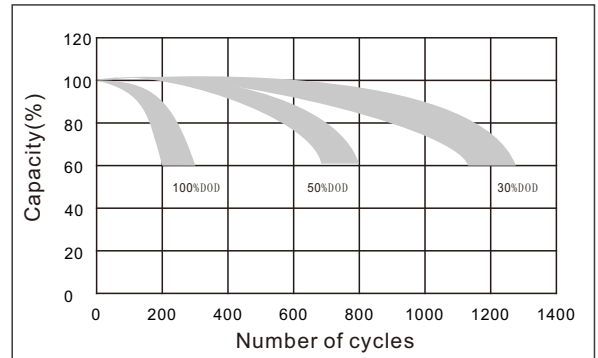
Charging characteristic



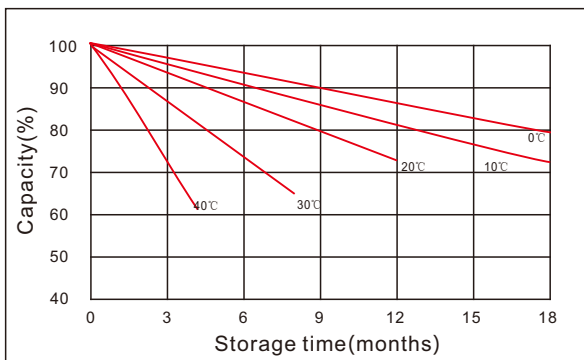
The effect of temperature on capacity



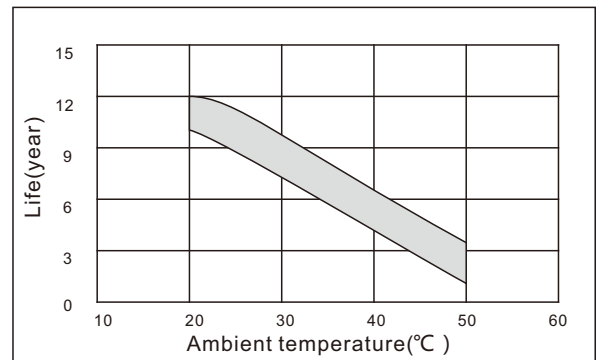
The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life



JM12-150_(12V150AH/HR)

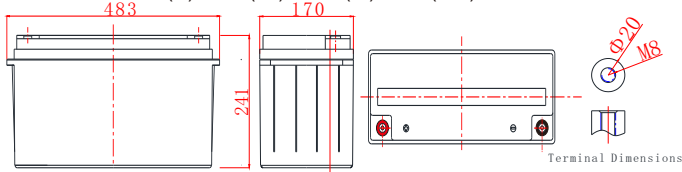


General Features

- 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: 483(L) × 170(W) × 241(H) × 241(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	150Ah
Design life	10 years
Terminal	M8
Approx. Weight	Approx 42.5kg (93.7lbs)
Container Material	ABS
Rated Capacity	150Ah 10Hour Rate (15.0A to 10.8V)
	121Ah 3Hour Rate (40.3A to 10.8V)
	98.2Ah 1Hour Rate (98.2A to 10.5V)
Internal resistance	Full charged at 25°C: 3.5 mΩ
Max. Discharge Current	1800A(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.37.5A ; Recom.15A
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)

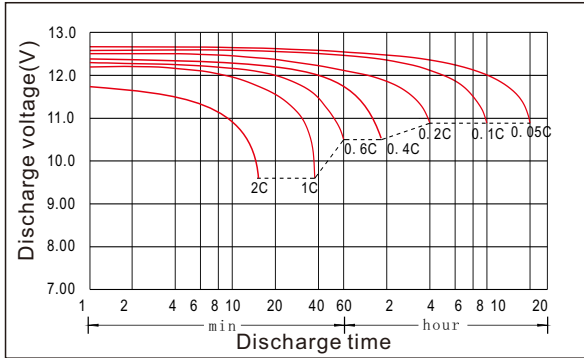
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	529	284	173	101	57.9	42.0	28.2	18.5	15.6	8.19
1.65V	512	275	170	100	57.6	41.6	27.9	18.4	15.5	8.15
1.70V	492	269	167	100	57.2	41.0	27.6	18.2	15.3	8.10
1.75V	452	261	165	98.2	56.3	40.6	27.3	18.1	15.2	8.07
1.80V	406	243	158	95.7	55.3	40.3	26.6	17.9	15.0	8.03
1.85V	362	217	144	88.6	52.5	37.9	25.3	17.2	14.6	7.89

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

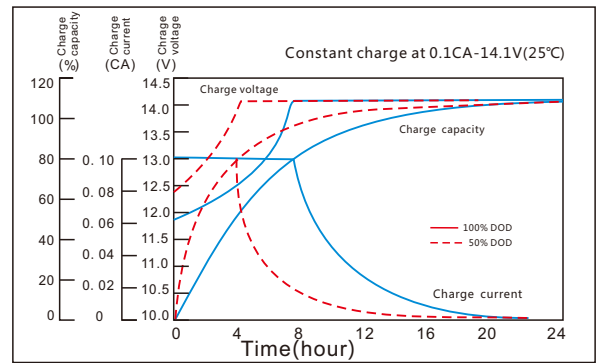
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	886	500	313	191	110	80.0	53.5	36.0	30.0	16.2
1.65V	852	491	310	189	109	78.9	53.2	35.7	29.7	16.1
1.70V	848	486	310	188	109	78.5	52.8	35.6	29.4	16.1
1.75V	791	483	308	187	108	78.1	52.5	35.3	29.1	16.0
1.80V	726	456	301	185	108	77.8	51.9	35.0	28.8	15.9
1.85V	648	408	276	172	103	73.9	49.5	33.8	28.4	15.8

JM12-150(12V150AH/HR)

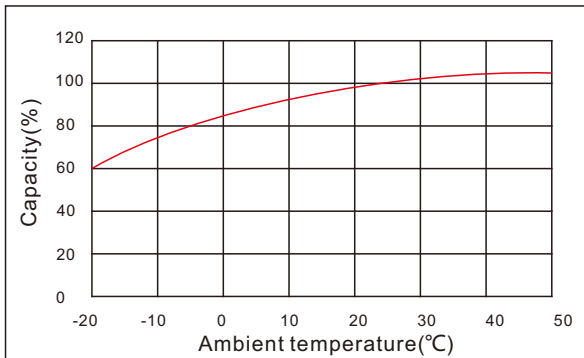
Discharge characteristic



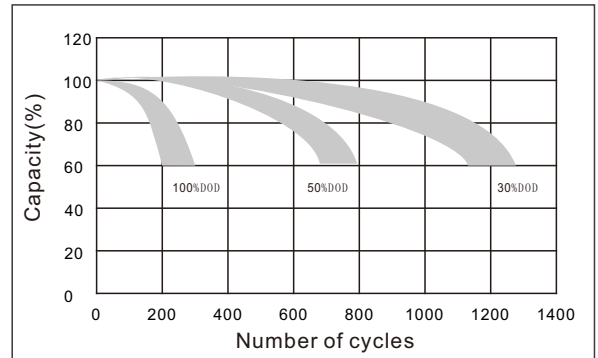
Charging characteristic



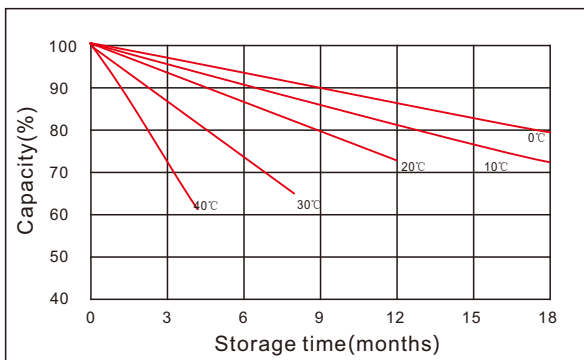
The effect of temperature on capacity



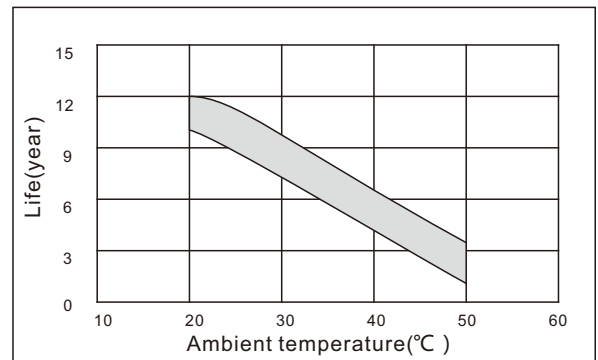
The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life



JM12-200 (12V200AH/10HR)



Applications

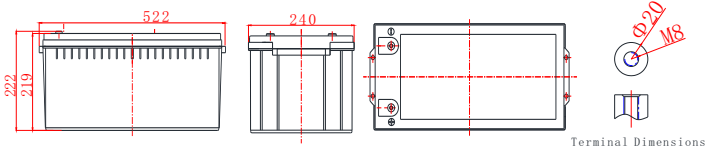
- > UPS/EPS
- > Power systems
- > Telecommunications system
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- > Solar/wind generating storage cyclic
- > Other general purpose

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: 522(L) × 240(W) × 219(H) × 222(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	200Ah
Design life	10 years
Terminal	M8
Approx. Weight	Approx 57.0kg (126lbs)
Container Material	ABS
Rated Capacity	200Ah 10Hour Rate (20.0A to 10.8V)
	161Ah 3Hour Rate (53.7A to 10.8V)
	131Ah 1Hour Rate (131A to 10.5V)
Internal resistance	Full charged at 25°C: 3.0 mΩ
Max. Discharge Current	2400A(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.50A ; Recom.20A
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)

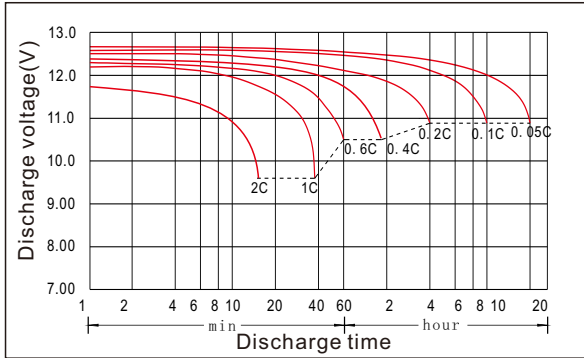
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	705	379	230	135	77.2	56.1	37.6	24.7	20.8	10.9
1.65V	683	367	226	134	76.8	55.5	37.2	24.5	20.6	10.9
1.70V	656	359	222	133	76.2	54.7	36.8	24.3	20.4	10.8
1.75V	603	348	221	131	75.1	54.1	36.5	24.1	20.2	10.8
1.80V	541	324	211	128	73.7	53.7	35.5	23.9	20.0	10.7
1.85V	482	289	192	118	70.0	50.6	33.7	22.9	19.4	10.5

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

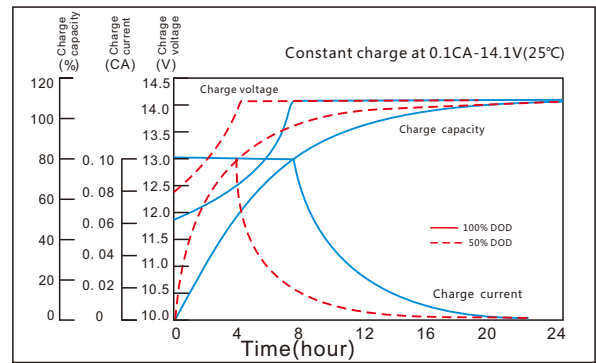
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	1181	667	417	255	146	107	71.3	48.0	40.0	21.6
1.65V	1136	655	413	253	146	105	71.0	47.6	39.6	21.5
1.70V	1131	647	413	251	145	105	70.4	47.4	39.2	21.4
1.75V	1054	643	411	249	144	104	70.0	47.0	38.8	21.3
1.80V	968	608	401	247	144	104	69.2	46.6	38.4	21.2
1.85V	865	544	368	229	137	98.6	66.1	45.1	37.8	21.0

JM12-200(12V200AH/10HR)

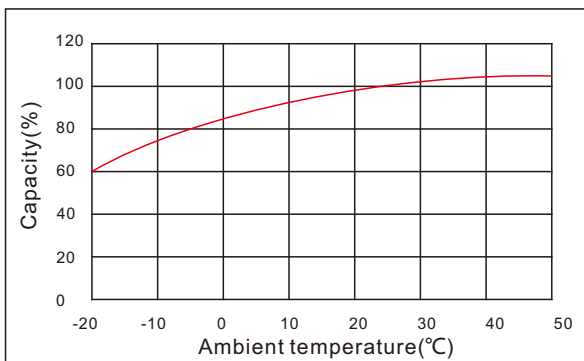
Discharge characteristic



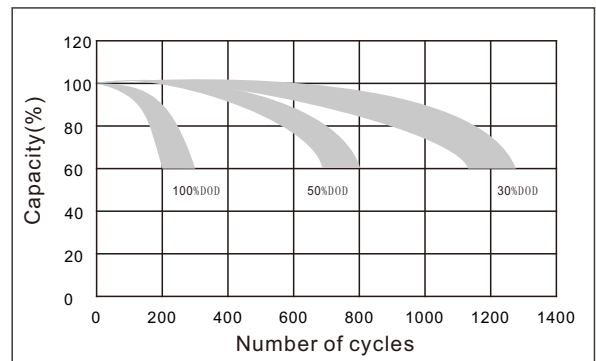
Charging characteristic



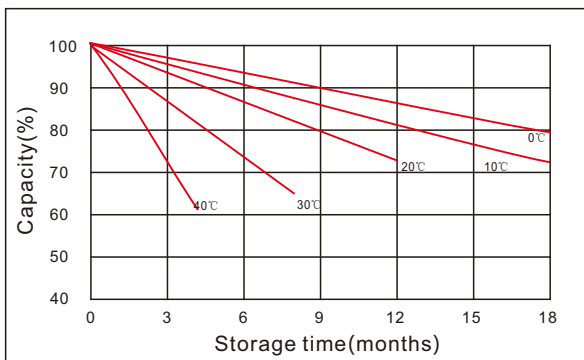
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

