

JDG series is a deep cycle battery technology with AGM hybrid gel. It has a long service life and is suitable for standby and energy storage. Like all batteries, all batteries are rechargeable, efficient, leak proof and maintenance free.



► Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	100Ah@10hr-rate to 1.80Vper cell @25°C(77°F)
Weight	Approx. 29.5kg(65.0 lbs)
Maximum Discharge Current	900A(5sec)
Internal Resistance	Approx. 5.5 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	30.0 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	This is Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using . For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M6 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



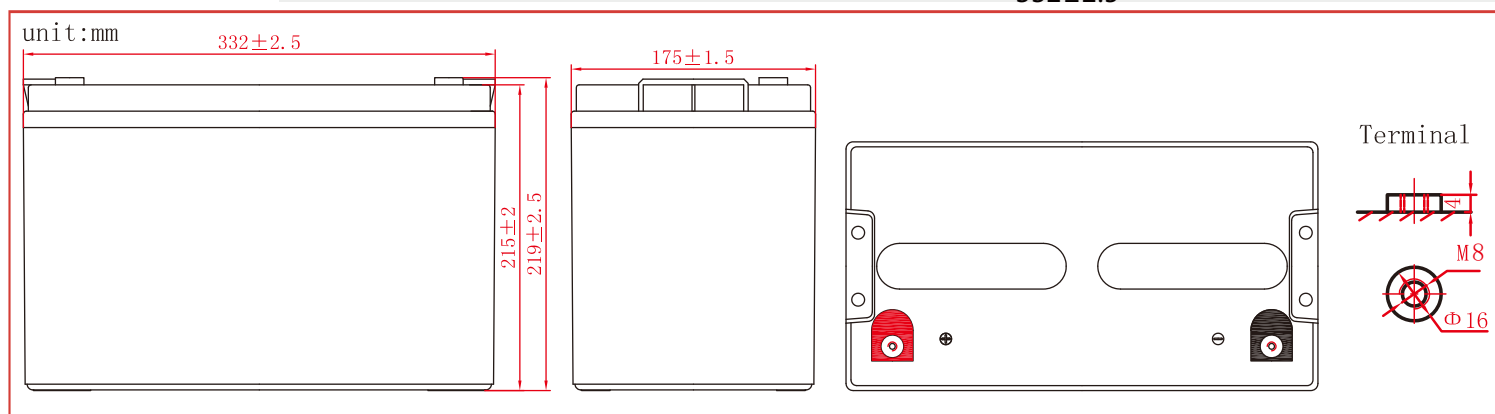
IT1548HL06061801



This is -manufactured VRLA (Absorbent Glass Mat type) batteries are UL-recognized components under UL1989.

This is also certified by ISO 9001 and ISO 14001.

► Dimensions :	Overall Height (H)	Containerheight(h)	Length (L)	Width (W)
	Unit: mm	219±2.5	215±2	332±2.5



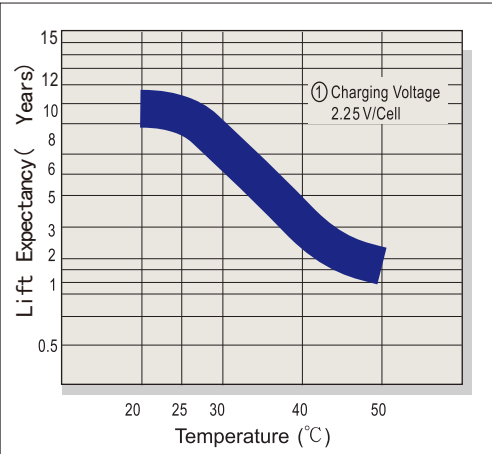
Constant Current Discharge Characteristics Unit : A(25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	105	77.4	63.7	26.8	18.0	12.4	10.3	5.47
1.67V	103	76.0	62.8	26.6	17.8	12.3	10.2	5.45
1.70V	102	75.1	62.1	26.4	17.7	12.3	10.2	5.44
1.75V	98.3	73.1	60.1	25.9	17.5	12.2	10.2	5.39
1.80V	93.7	70.5	57.5	25.0	17.0	12.0	10.0	5.31
1.85V	87.7	67.0	53.4	22.9	15.8	11.4	9.61	5.13

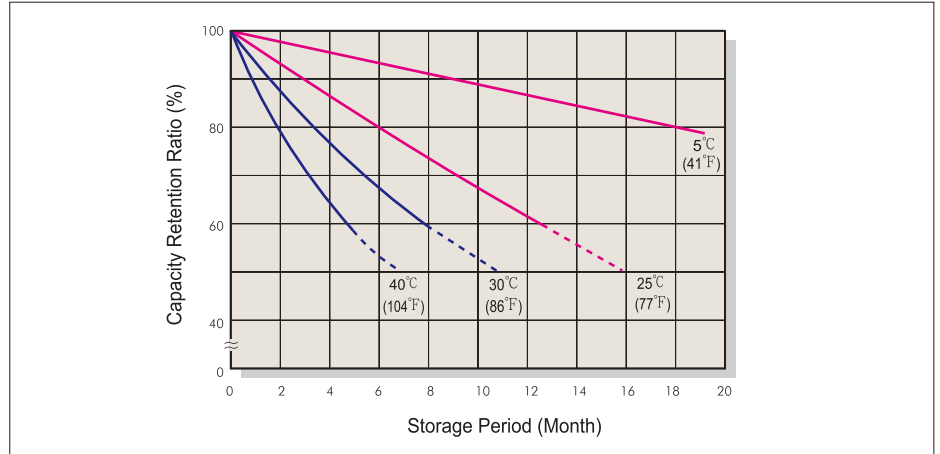
Constant Power Discharge Characteristics Unit : : W/cell (25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	174	130	108	50.2	35.0	24.1	20.2	10.8
1.67V	169	126	107	49.7	34.9	24.0	20.1	10.7
1.70V	164	124	106	49.4	34.8	24.0	20.1	10.7
1.75V	155	117	103	48.4	34.4	23.8	19.9	10.6
1.80V	143	109	101	46.7	33.4	23.4	19.6	10.4
1.85V	128	98.6	94.9	43.4	31.4	22.6	19.0	10.1

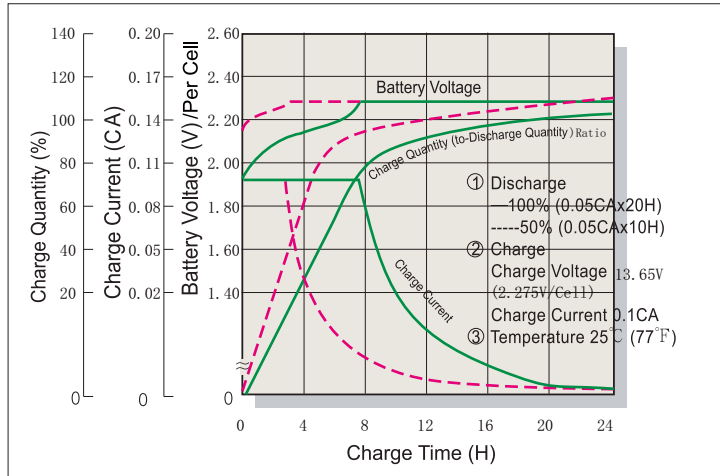
Trickle(or Float)Design Life



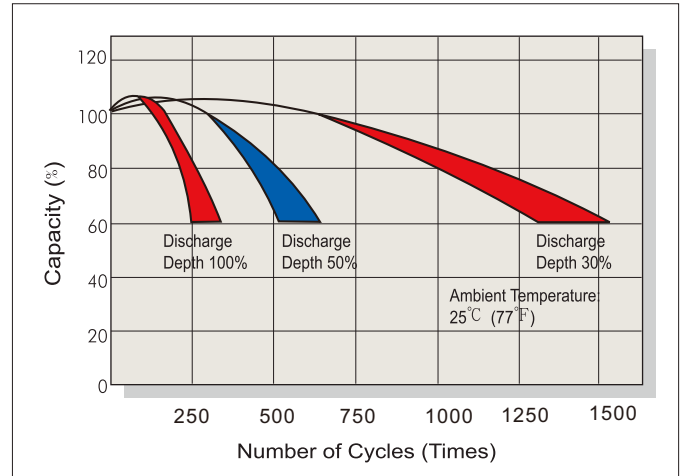
Capacity Retention Characteristic



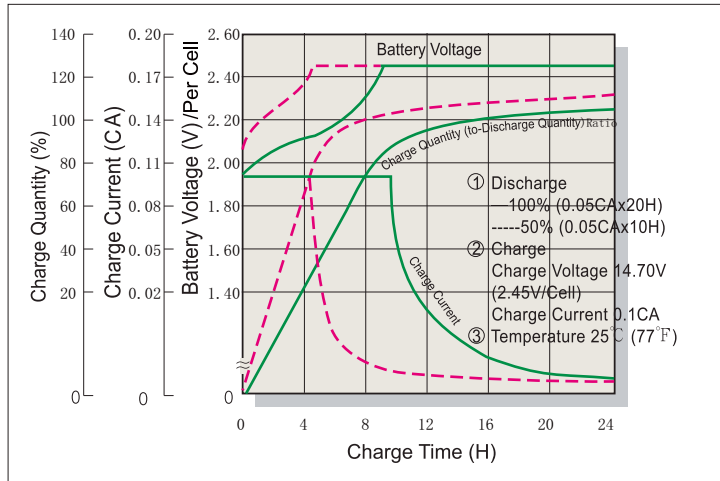
Battery Voltage and Charge Time for Standby Use



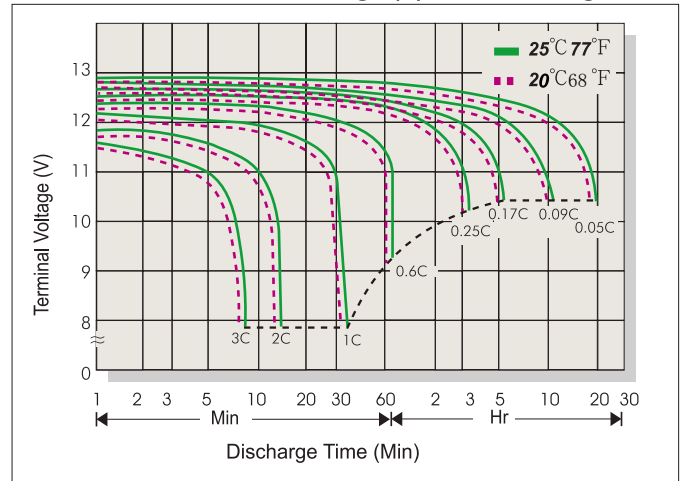
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.30C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity (10HR)

Temperature	Dependency of Capacity (10HR)
40 °C	102%
25 °C	100%
0 °C	85%
-15 °C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%



JDG series is a deep cycle battery technology with AGM hybrid gel. It has a long service life and is suitable for standby and energy storage. Like all batteries, all batteries are rechargeable, efficient, leak proof and maintenance free.

► Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah @10hr-rate to 1.80Vper cell@25°C(77°F)
Weight	Approx. 45kg (99.2 lbs)
Maximum Discharge Current	1200A(5sec)
Internal Resistance	Approx. 4 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	37.5 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	This is Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using . For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



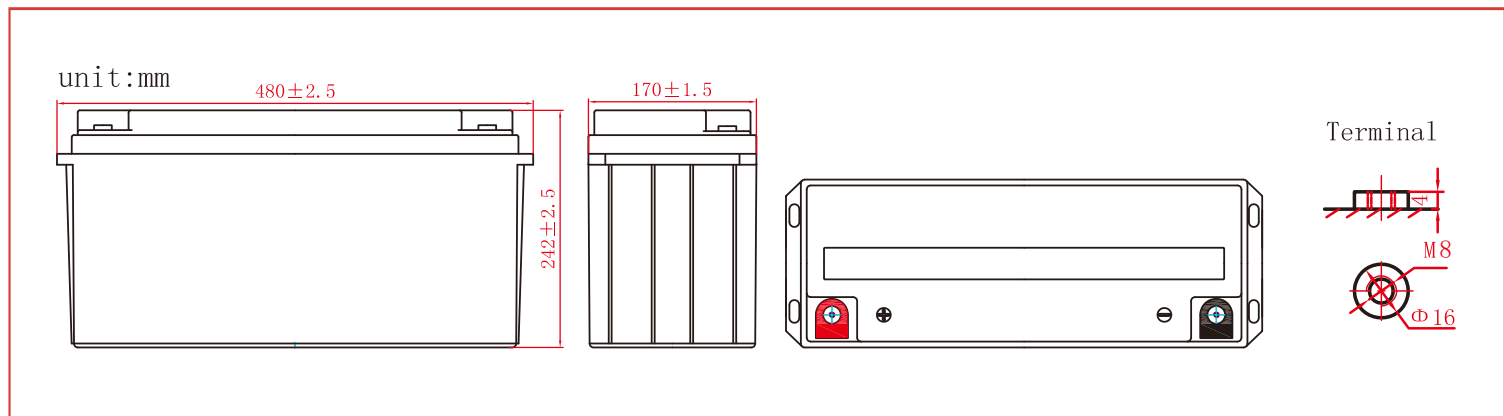
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This is -manufactured VRLA (Absorbent Glass Mat type) batteries are UL-recognized components under UL1989.

This is also certified by ISO 9001 and ISO 14001.

► Dimensions :	Overall Height (H)	Containerheight (h)	Length (L)	Width (W)
	Unit: mm	242±2.5	242±2.5	480±2.5



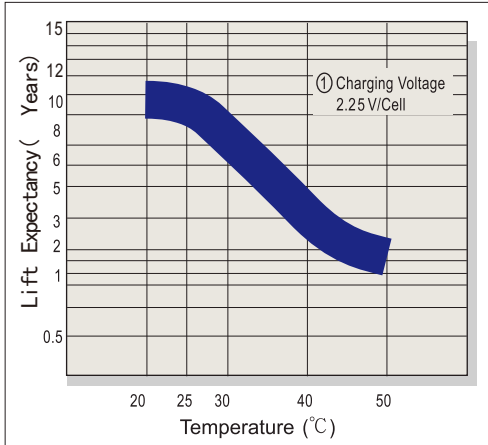
Constant Current Discharge Characteristics Unit : A(25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	158	116	95.6	40.1	26.9	18.5	15.4	8.20
1.67V	155	114	94.2	39.8	26.7	18.5	15.3	8.18
1.70V	153	113	93.1	39.5	26.6	18.4	15.3	8.15
1.75V	147	110	90.2	38.8	26.2	18.3	15.2	8.08
1.80V	141	106	86.3	37.4	25.4	18.0	15.0	7.96
1.85V	132	100	80.0	34.4	23.6	17.1	14.4	7.69

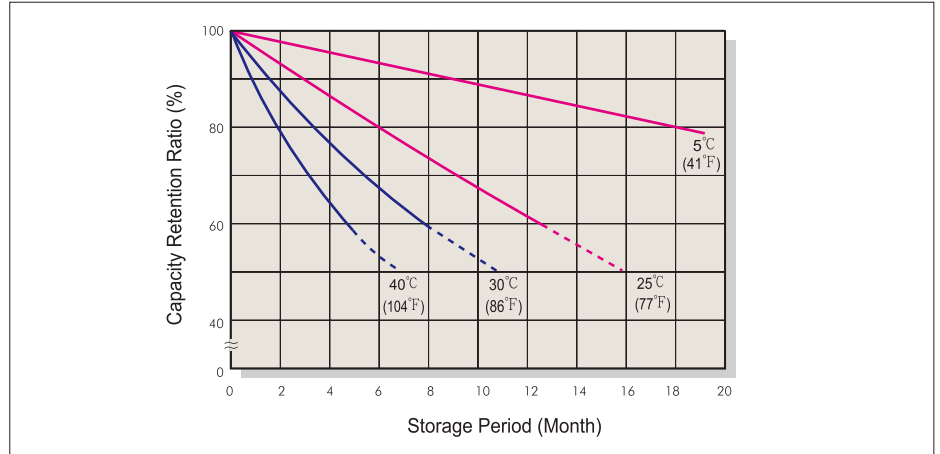
Constant Power Discharge Characteristics Unit : : W/cell (25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	261	194	163	75.3	52.5	36.2	30.3	16.1
1.67V	254	189	161	74.6	52.4	36.0	30.2	16.1
1.70V	246	185	159	74.0	52.2	36.0	30.1	16.0
1.75V	232	176	155	72.6	51.5	35.7	29.9	15.9
1.80V	215	164	151	70.1	50.1	35.0	29.4	15.7
1.85V	192	148	142	65.0	47.1	33.8	28.5	15.2

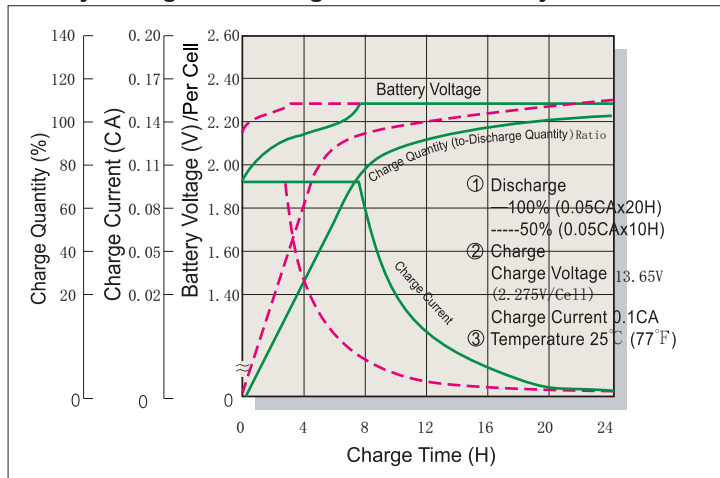
Trickle(or Float)Design Life



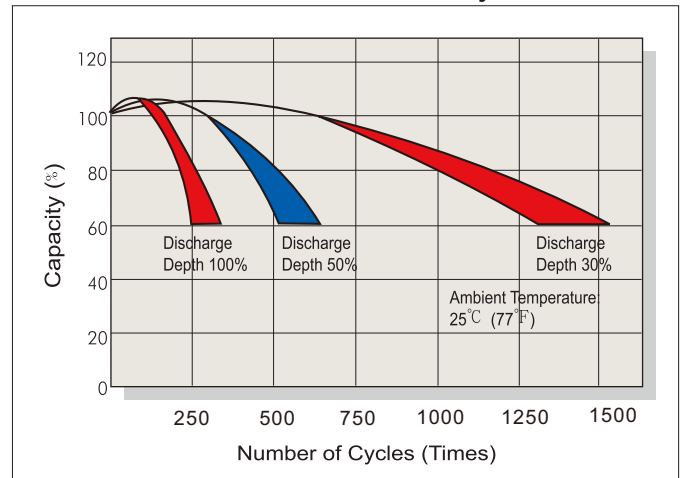
Capacity Retention Characteristic



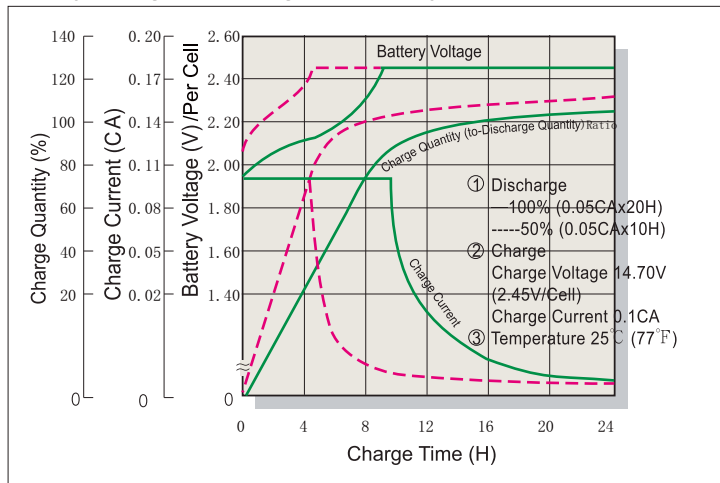
Battery Voltage and Charge Time for Standby Use



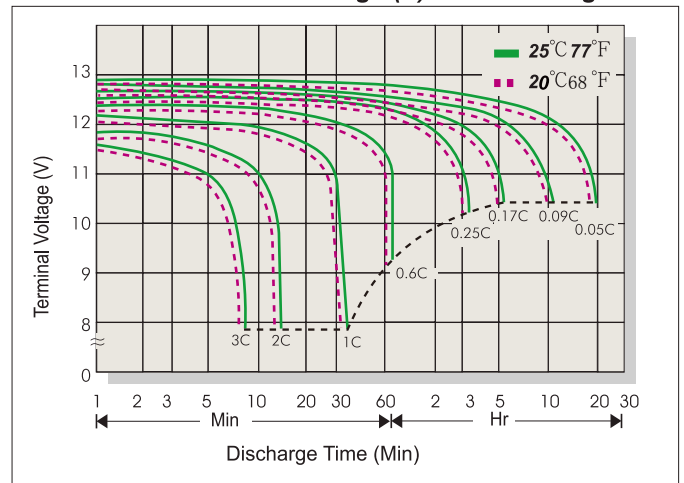
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.25C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity (10HR)

Temperature	Dependency of Capacity (10HR)
40°C	102%
25°C	100%
0°C	85%
-15°C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%

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Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah @10hr-rate to 1.75Vper cell @25°C(77°F)
Weight	Approx. 59 (130.1lbs)
Maximum Discharge Current	1600A(5sec)
Internal Resistance	Approx. 3 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	50A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	This is Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using . For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



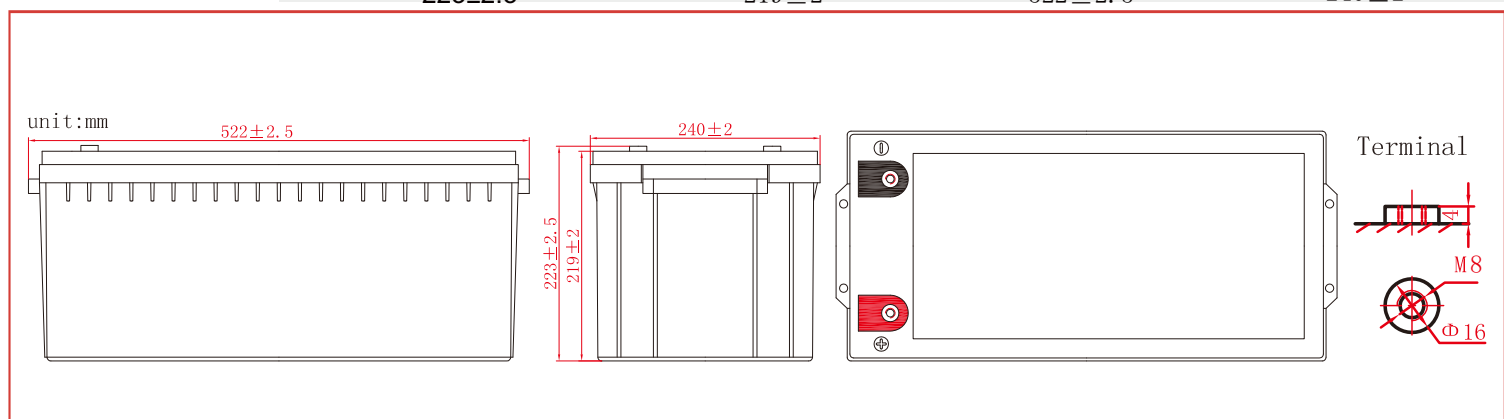
IT1548HL06061801



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This is also certified by ISO 9001 and ISO 14001.

Dimensions :	Overall Height (H)	Containerheight (h)	Length (L)	Width (W)
	Unit: mm	223±2.5	219±2	522±2.5



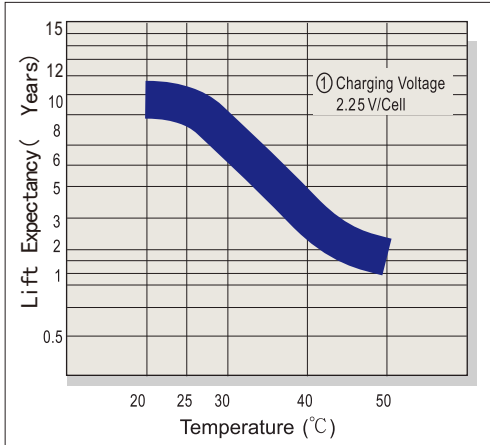
Constant Current Discharge Characteristics Unit : A(25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	207	152	125.4	52.7	35.3	24.3	20.2	10.76
1.67V	203	150	123.6	52.3	35.1	24.3	20.1	10.73
1.7V	201	148	122.2	51.9	34.9	24.2	20.1	10.70
1.75V	194	144	118.3	50.9	34.3	24.0	20.0	10.60
1.8V	184	139	113.2	49.1	33.4	23.6	19.7	10.44
1.85V	173	132	105.0	45.1	31.0	22.5	18.9	10.09

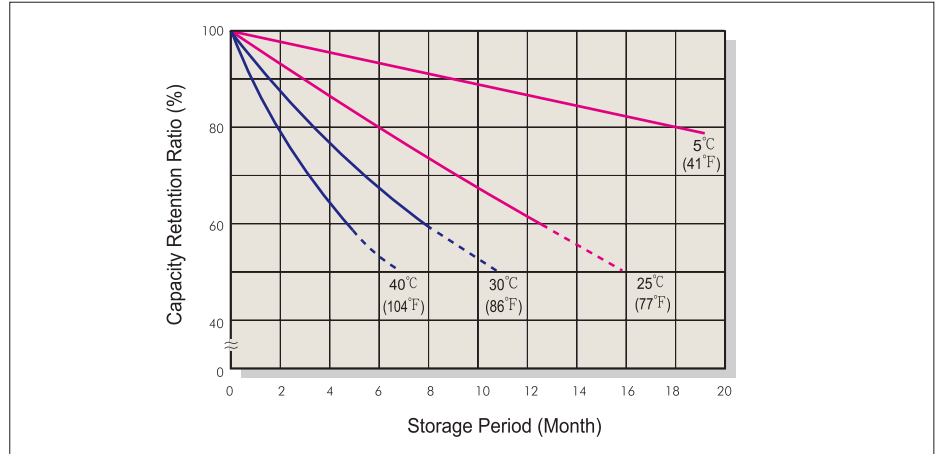
Constant Power Discharge Characteristics Unit : : W/cell (25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	342	255	213.4	98.9	68.9	47.5	39.7	21.17
1.67V	333	248	210.7	97.9	68.7	47.3	39.6	21.07
1.7V	323	243	208.8	97.1	68.5	47.2	39.5	21.00
1.75V	305	231	203.7	95.3	67.6	46.8	39.2	20.80
1.8V	282	215	198.4	91.9	65.8	46.0	38.6	20.54
1.85V	252	194	186.8	85.3	61.8	44.4	37.4	19.96

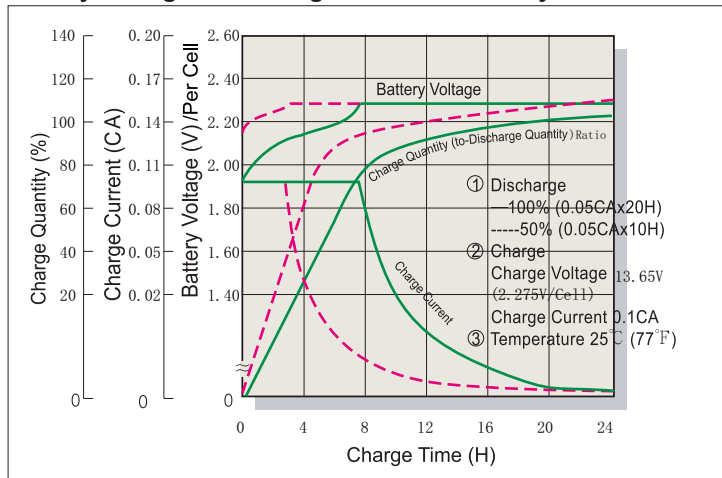
Trickle(or Float)Design Life



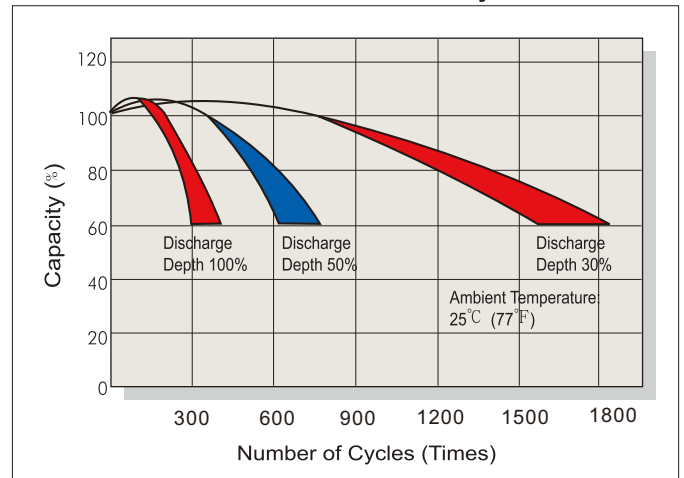
Capacity Retention Characteristic



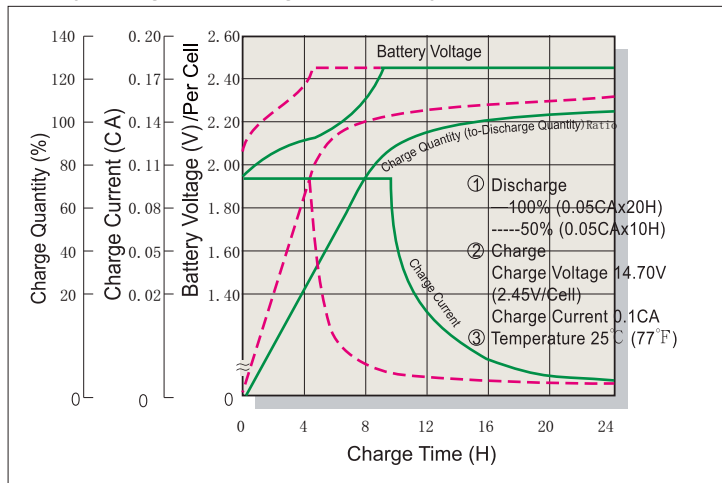
Battery Voltage and Charge Time for Standby Use



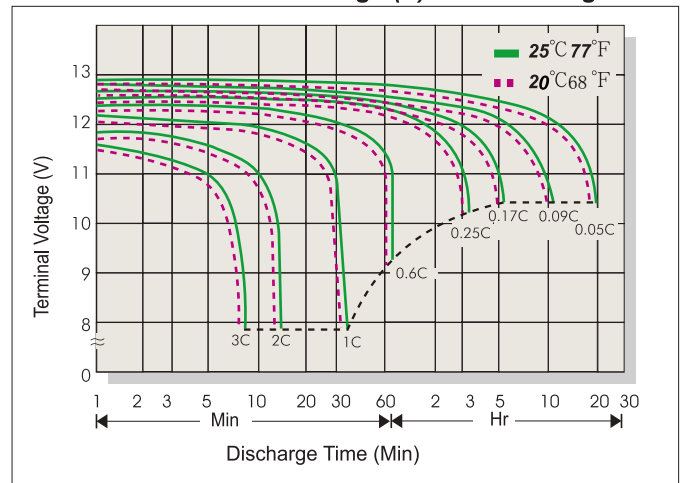
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.25C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

Effect of temperature on capacity (20HR)

Temperature	Dependency of Capacity (20HR)
40°C	102%
25°C	100%
0°C	85%
-15°C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%