

# CHT800-2

2V 800AH

High Temperature Battery



## CHT800-2



## Physical Specification

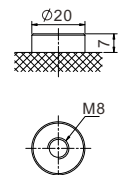
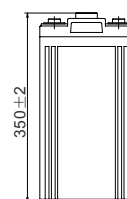
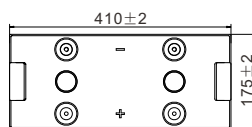
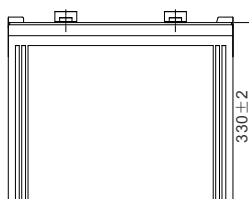
Part Number:	<b>CHT800-2</b>
Length:	<b>410 ± 2 mm (16.14 inches)</b>
Width:	<b>175 ± 2 mm (6.89 inches)</b>
Container Height:	<b>330 ± 2 mm (12.99 inches)</b>
Total Height (with terminal):	<b>350 ± 2 mm (13.78 inches)</b>
Approx Weight:	<b>58.4 kg (128.75 lbs)</b>

## Specifications

	Nominal Voltage	2V					
	Nominal Capacity (10HR)	800AH					
<b>Terminal Options</b>	Standard Terminal	T11					
	Terminal Specs	(M8,Torque11~14.7N m)					
<b>Container Material</b>	Standard Option	ABS (High Temperature Resistant Material)					
	Flame Retardant Option (FR)	ABS (UL94:VO)					
<b>Rated Capacity(35°)</b>	C20(42.4A,1.80V/cell)	848.0 Ah					
	C10(80.0A,1.80V/cell)	800.0 Ah					
	C5(142.1A,1.75V/cell)	710.5Ah					
	C3(212.0A,1.75V/cell)	636.0 Ah					
	C1(492.0A,1.67V/cell)	492.0 Ah					
<b>Max Discharge Current</b>	4800A (5s)						
<b>Internal Resistance</b>	Approx 0.4mΩ						
<b>Discharge Characteristics</b>	Operating Temp. Range	The battery can operate at temperatures of -40C ~ +65C. Extreme temperature can be up to 80C.					
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)					
	Cycle Use	Initial Charging Current less than 200A.Voltage 2.35V ~ 2.40V at 25°C (77°F) Temp. Coefficient -30mV/°C					
	Standby Use	Initial Charging Current less than 200A.Voltage 2.25V at 25°C (77°F) Temp. Coefficient -20mV/°C					
	Capacity affected by Temperature	<table border="1"> <tr> <td>40°C (104°F)</td> <td>103%</td> </tr> <tr> <td>25°C (77°F)</td> <td>100%</td> </tr> <tr> <td>0°C (32°F)</td> <td>79%</td> </tr> </table>	40°C (104°F)	103%	25°C (77°F)	100%	0°C (32°F)
40°C (104°F)	103%						
25°C (77°F)	100%						
0°C (32°F)	79%						
<b>Design Floating Life at 20°C</b>	5 Years						
<b>Self Discharge</b>	Canbat High Temperature Batteries may be stored for up to 6 months at 25°C(77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.						

## Dimensions

### T11 Terminal



To ensure safe and efficient operation always refer to the latest edition of our datasheets, as published on our website [www.canbat.com](http://www.canbat.com). Canbat Technologies Inc. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E

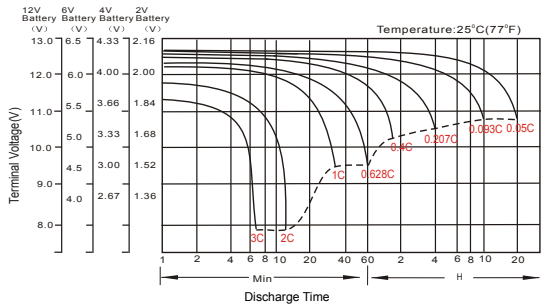
## Constant Current Discharge (Amperes) at 35° C (95° F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	933.4	792.0	722.9	650.4	547.2	448.0	376.8	249.6	192.5	155.4	131.0	114.3	91.2	76.5	40.5
1.80V/cell	1136.0	926.4	823.8	732.0	603.2	486.4	408.5	266.4	202.1	162.0	136.5	118.4	95.0	80.0	42.4
1.75V/cell	1327.7	1065.6	932.0	820.8	660.8	530.1	446.1	281.6	212.0	170.0	142.1	122.8	97.6	81.6	43.2
1.70V/cell	1519.5	1195.2	1030.1	892.8	710.4	562.1	472.0	295.6	221.3	176.0	146.3	126.7	100.5	83.6	44.3
1.67V/cell	1631.3	1286.4	1110.4	960.0	752.0	586.7	492.0	307.2	228.4	181.0	150.3	129.6	101.8	85.0	45.0
1.60V/cell	1776.0	1377.6	1177.6	1008.0	785.6	612.3	512.9	318.8	233.8	185.0	153.5	132.0	103.6	85.8	45.4

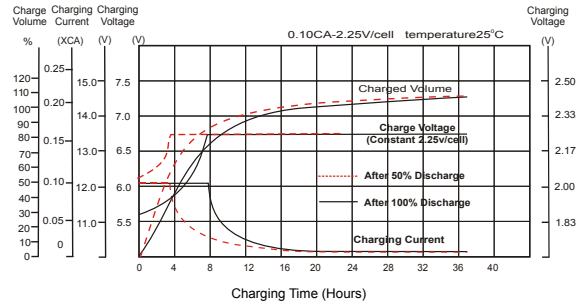
## Constant Power Discharge (Watts/cell) at 35° C (95° F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1743.2	1490.0	1368.7	1237.1	1045.8	861.4	728.8	485.5	376.2	304.8	258.1	225.8	181.0	152.1	80.6
1.80V/cell	2086.9	1717.5	1539.6	1377.6	1143.5	929.0	785.7	515.7	393.1	316.7	267.7	233.0	188.0	158.9	84.3
1.75V/cell	2396.6	1944.2	1717.2	1527.1	1243.2	1006.6	854.2	543.0	411.3	331.2	277.7	240.9	192.7	161.9	85.9
1.70V/cell	2697.0	2150.2	1878.6	1646.9	1325.3	1060.0	899.0	567.6	427.8	341.4	285.1	248.1	198.2	165.7	87.9
1.67V/cell	2843.3	2279.8	1999.8	1751.8	1392.4	1100.0	931.9	587.3	439.5	350.0	291.9	253.1	200.2	168.1	89.2
1.60V/cell	3031.6	2393.6	2085.8	1818.4	1440.0	1137.3	964.7	605.7	447.5	356.1	296.8	257.0	203.4	169.4	89.8

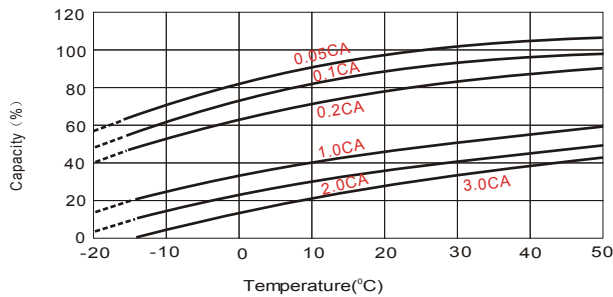
### Discharge Characteristics



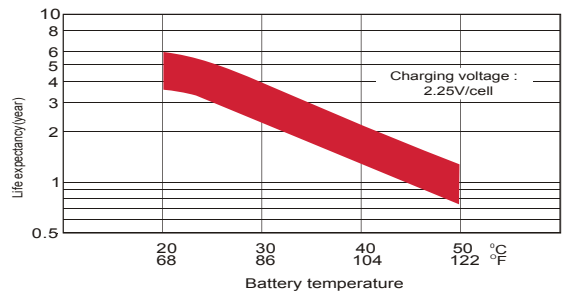
### Float Charging Characteristics



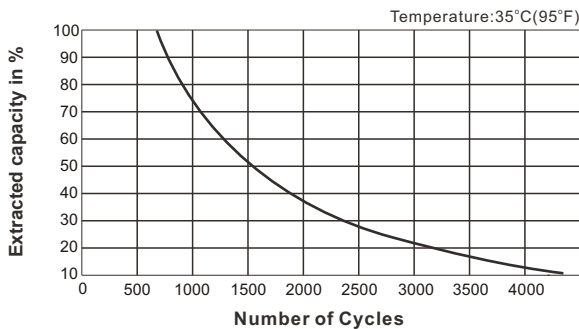
### Temperature Effects in Relation to Battery Capacity



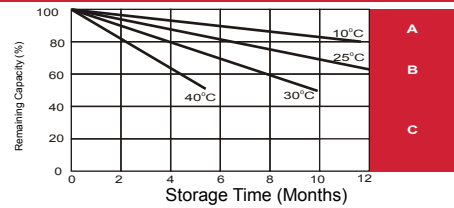
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



- A No supplementary required  
(Carryout supplementary charge before use if 100% capacity is required.)
- B Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25V/cell.  
3. Charged for 8 ~ 10 hours at limited current 0.05 CA.
- C Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

To ensure safe and efficient operation always refer to the latest edition of our datasheets, as published on our website [www.canbat.com](http://www.canbat.com). Canbat Technologies Inc. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E