

### Specifications

#### Nominal Voltage(V)

12V

#### Nominal Power

15 mins rate: 600W/cell to 1.67V/cell

#### Nominal Capacity

20 hour rate	(10A to 10.50V)	200Ah
10 hour rate	(19.2A to 10.50V)	192Ah
8 hour rate	(22A to 10.50V)	176Ah
5 hour rate	(34A to 10.20V)	170Ah

#### Weight

Approx. 55kg(121Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 3 mΩ

#### Maximum Discharge Current for

5 seconds: 1600A

#### Short Circuit Current (A) IEC 60896 -21-22

3210A

#### Charging Methods at 25°C(77°F)

Maximum Charging Current :	60A
Boost Charging Voltage	14.1 to 14.4V
Boost Charge Time	8-9Hr
Float Charging Voltage	13.5 to 13.65V
Coefficient	-3.0mV/°C/cell

#### Operating Temperature Range

Charge	-15°C(5°F) to 45°C(113°F)
Discharge	-15°C(5°F) to 50°C(122°F)
Storage	-15°C(5°F) to 40°C(104°F)

#### Charge Retention (shelf life) at 20°C(68°F)

1 month	98%
3 month	94%
6 month	85%

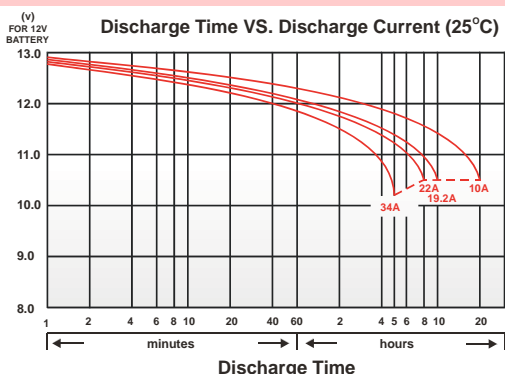
#### Case Material

ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

#### Design Life

Expected Trickle Design Life: 10-12 years at 20°C according to Eurobat.

#### Discharge Time VS. Discharge Current (25°C)

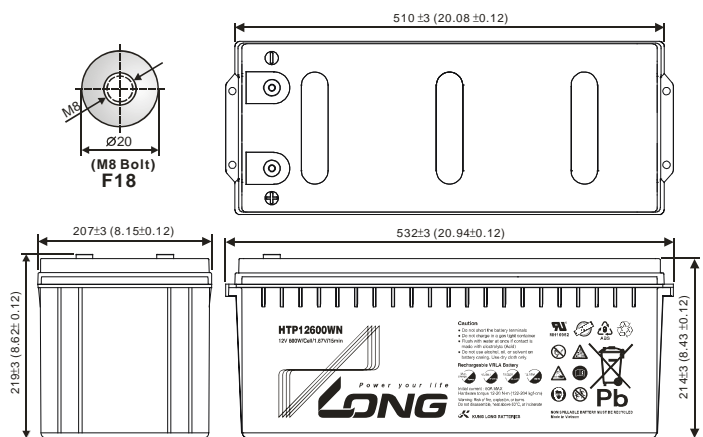


### Dimensions

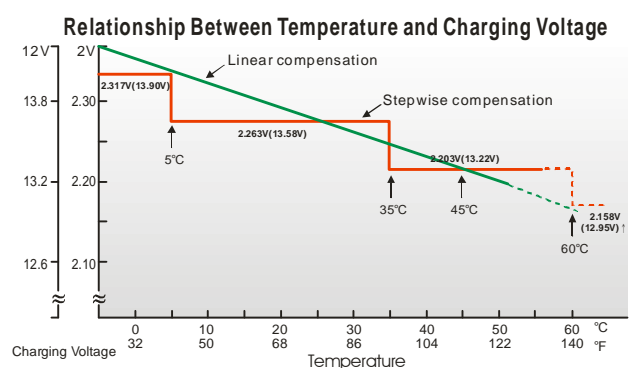
Length (L)	532±3(20.94±0.12)
Width (W)	207±3(8.15±0.12)
Height (H)	214±3(8.43±0.12)
Overall Height (HT)	219±3(8.62±0.12)
Terminal	F18

#### Description of torque value of hard ware for the terminals:

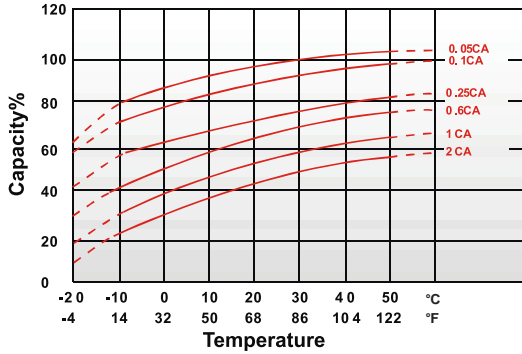
Recommended torque value	M8: 12N-m (122 kgf-cm)
Maximum allowable torque value	M8: 20 N-m (204 kgf-cm)



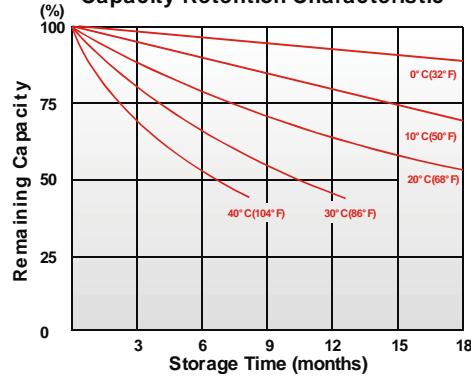
#### Relationship Between Temperature and Charging Voltage



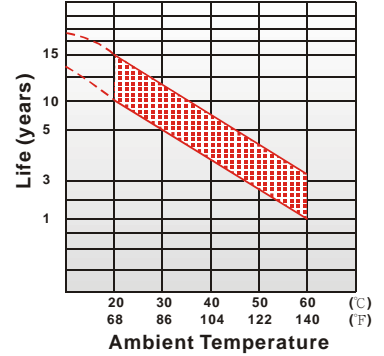
Effect of Temperature on Capacity 25°C (77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



### - PERFORMANCE DATA

#### Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

End Voltage		1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time							
3	min	1228	1265	1306	1336	1343	1357
5	min	957	977	996	1108	1117	1135
10	min	790	805	819	848	854	865
15	min	644	679	702	711	718	731
20	min	545	560	586	605	610	621
25	min	480	492	515	532	537	546
30	min	413	432	449	467	474	486
45	min	303	316	331	341	346	356
60	min	237	248	259	268	272	278

#### - Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

End Voltage		1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time							
3	min	885	900	915	930	941	944
5	min	656	670	689	703	713	715
10	min	435	455	466	484	491	493
15	min	335	343	352	357	362	363
20	min	305	315	322	328	331	331
25	min	269	278	283	291	295	295
30	min	241	249	256	260	265	266
45	min	177	185	194	199	207	208
60	min	139	144	152	156	162	163

All data on the spec. sheet is an average value:

The tolerance range :  $X < 6\text{min}$  (+15%~-15%),  $6\text{min} \leq X < 10\text{min}$  (+12%~-12%),  $10\text{min} \leq X < 60\text{min}$  (+8%~-8%),  $X \geq 60\text{min}$  (+5%~-5%)

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