

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(7.5A to 10.50V)	150Ah
10 hour rate	(15A to 10.80V)	150Ah
5 hour rate	(25.5A to 10.20V)	127.5Ah
1 hour rate	(90A to 9.60V)	90Ah
1 C	(150A to 9.60V)	75Ah

#### Weight

Approx. 45.0kg(99.0Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 4.5 mΩ

#### Maximum Discharge Current for

5 seconds: 900A

#### Charging Methods at 25°C(77°F)

Maximum Charging Current :	45A
Boost Charging Voltage	14.4 to 15.0V
Boost Charge Time	8-9Hr
Float Charging Voltage	13.5 to 13.8V
Coefficient	-3.0mV/°C/cell

#### Operating Temperature Range

Charge	-15°C(5°F)	to	40°C(104°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

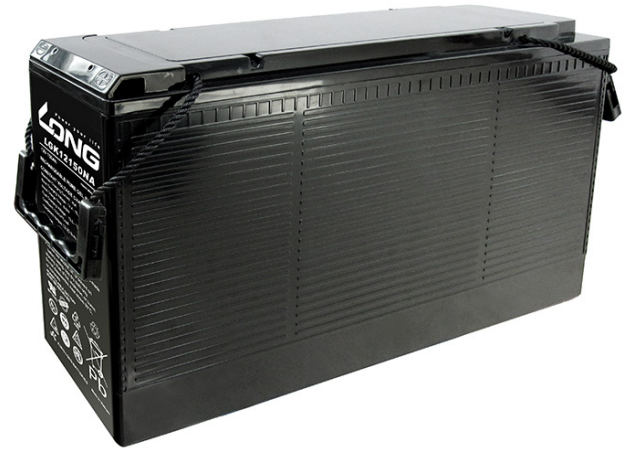
ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

#### Design Life

12 Years.

#### Terminal

F18



### ⚡ Dimensions

Length (L) 550±3 (21.65±0.12)

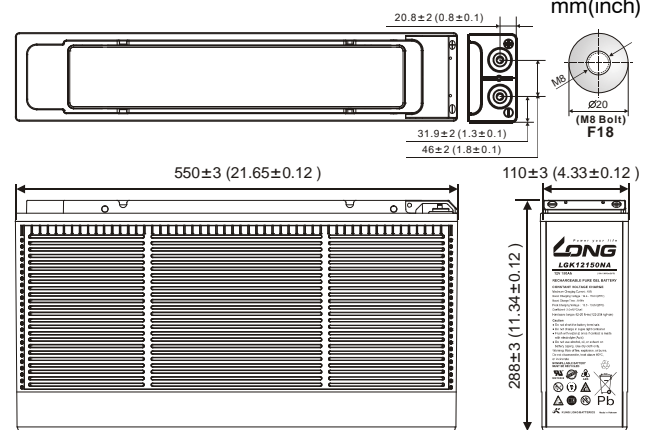
Width (W) 110±3 (4.33±0.12)

Height (H) 288±3 (11.34±0.12)

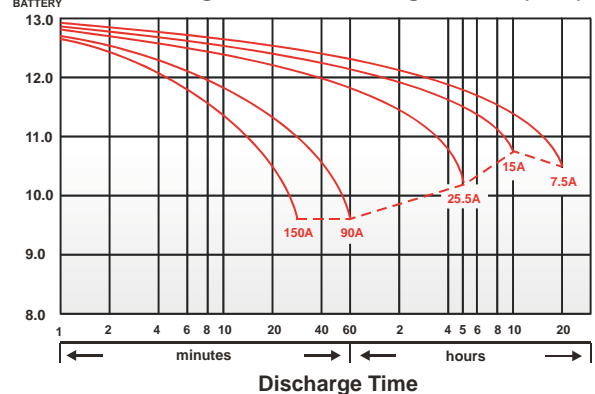
Overall Height (HT) 288±3 (11.34±0.12)

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

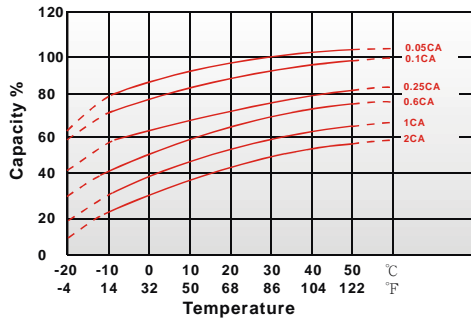
Recommended torque value M8: 12 N-m (122kgf-cm)  
Maximum allowable torque value M8: 20 N-m (204kgf-cm)



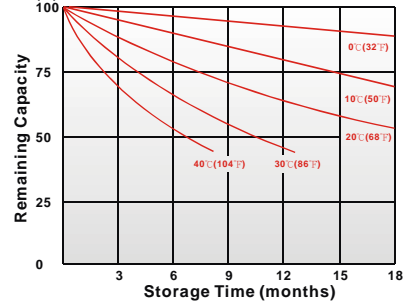
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



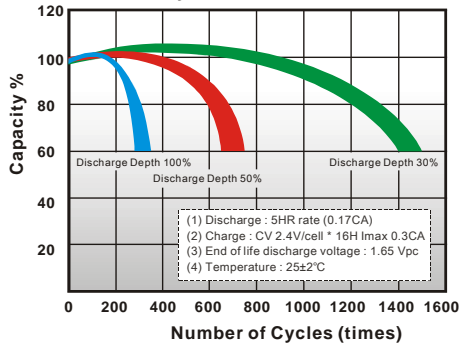
Effect of Temperature on Capacity 25°C(77°F)



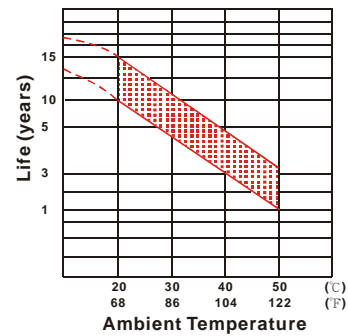
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



### - PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
15	min	330	405	456	489	499	509	520
30	min	197	241	272	291	297	303	310
60	min	164	175	182	186	187	188	189
120	min	88.3	93.2	95.8	98	98.8	99.7	101
180	min	70.2	73.8	76.5	78.5	79.2	80	80.8
240	min	57.5	60.3	62.2	63.7	64.2	64.8	65.5
300	min	48.8	51.2	52.6	53.2	53.4	53.6	53.8
480	min	32.4	33.3	34.6	35.5	35.8	36.1	36.4
600	min	29.3	30.2	30.8	31.1	31.3	31.5	31.7
1200	min	15.0	15.5	15.8	16.0	16.2	16.3	16.4

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
15	min	187	217	241	261	275	288	298
30	min	107	132	148	159	162	165	169
60	min	82.7	89.9	92.7	94.8	95.6	96.4	97.5
120	min	43.7	49.6	52.1	53.9	54.6	55.4	56.4
180	min	33.4	37.2	39.1	40.5	41	41.6	42.3
240	min	27.4	30.1	31.4	32.4	32.7	33.1	33.5
300	min	22.7	24.3	25.5	25.9	26.2	26.4	26.6
480	min	15.9	17.3	17.5	17.7	17.9	18.1	18.3
600	min	14.4	15.0	15.1	15.2	15.3	15.4	15.5
1200	min	7.23	7.50	7.57	7.63	7.68	7.74	7.80

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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