

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

10 hour rate	(10A	to	10.80V)	100Ah
5 hour rate	(17A	to	10.20V)	85Ah
1 hour rate	(60A	to	9.60V)	60Ah
1C	(100A	to	9.60V)	63.33Ah

Weight

Approx. 30.0kg(66.0Lbs.)

Internal Resistance (at 1KHz)

Approx. 5 mΩ

Maximum Discharge Current for

5 seconds:1200A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	30A
Standby use:	
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

3-5 Years.

Terminal

F8

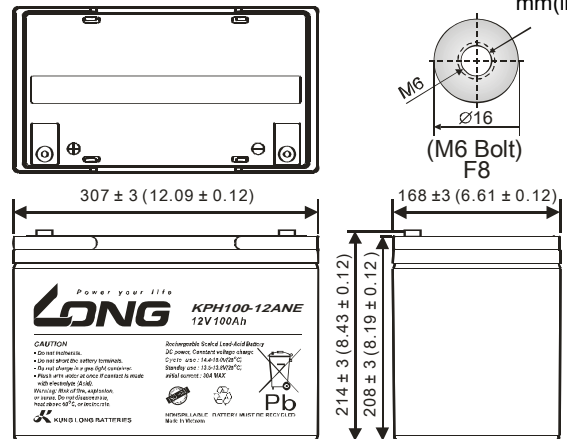


⚡ Dimensions

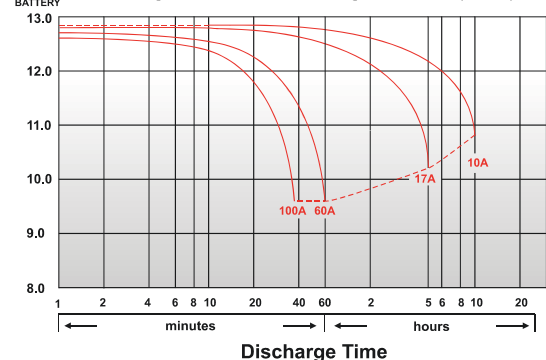
Length (L)	307±3 (12.09±0.12)
Width (W)	168±3 (6.61±0.12)
Height (H)	208±3 (8.19±0.12)
Overall Height (HT)	214±3 (8.43±0.12)

Description of torque value of hard ware for the terminals:

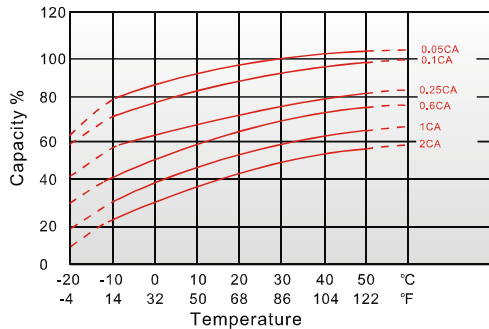
Recommended torque value	M6: 7 N-m (71 kgf-cm)
Maximum allowable torque value	M6: 10 N-m (102 kgf-cm)



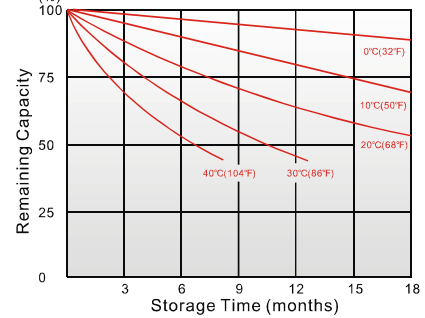
(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



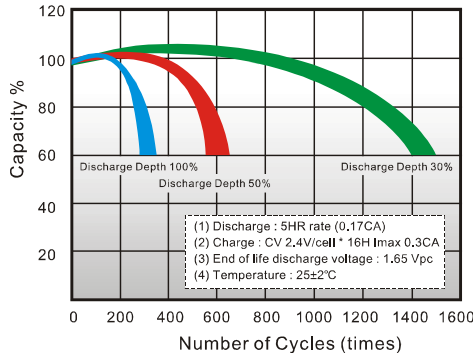
Effect of Temperature on Capacity 25°C(77°F)



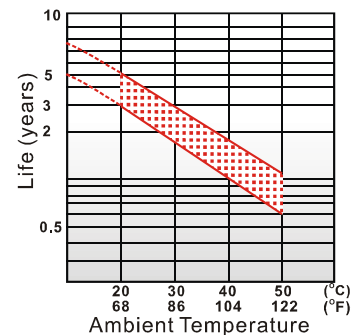
Capacity Retention Characteristic



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								
5	min	440	492	527	561	576	592	623
10	min	338	369	395	419	430	441	463
15	min	269	292	310	328	336	343	359
30	min	158	169	178	185	189	193	200
60	min	110	114	117	120	121	123	123
120	min	65.0	68.1	70.6	72.0	73.0	74.2	75.7
180	min	46.7	49.2	51.3	51.7	52.5	53.5	54.6
240	min	34.8	36.9	38.9	40.9	41.6	42.4	43.4
300	min	31.0	32.5	33.9	34.8	35.1	35.6	36.3
600	min	18.0	19.2	20.0	20.8	21.2	21.5	21.8
1200	min	10.0	10.3	10.6	10.8	10.8	10.9	11.0

- 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								
5	min	194	256	293	323	332	344	360
10	min	154	182	203	219	227	236	249
15	min	115	142	160	174	178	184	192
30	min	69.1	81.2	89.3	98.0	99.9	102.8	107.7
60	min	42.7	49.8	55.4	59.4	60.3	61.7	63.6
120	min	25.3	28.7	31.9	34.9	35.7	36.6	37.7
180	min	22.4	23.5	24.6	25.4	25.8	26.2	26.9
240	min	18.1	18.9	19.6	20.3	20.6	20.9	21.4
300	min	15.9	16.5	17.0	17.4	17.6	17.7	17.9
600	min	9.71	10.00	10.20	10.40	10.50	10.60	10.70
1200	min	4.89	5.05	5.16	5.26	5.31	5.35	5.41

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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