

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(3.25A to 10.50V)	65Ah
10 hour rate	(6.5A to 10.50V)	65Ah
5 hour rate	(11.05A to 10.20V)	55.25Ah
1 hour rate	(39A to 9.60V)	39Ah
1C	(65A to 9.60V)	41.17Ah

Weight

Approx. 22.5kg(49.5Lbs.)

Internal Resistance (at 1KHz)

Approx. 6 mΩ

Maximum Discharge Current for

5 seconds:780A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	19.5A
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

12 Years.

Terminal

F8



⚡ Dimensions

Length (L) 260 ± 0.08 (10.24 ± 0.04)

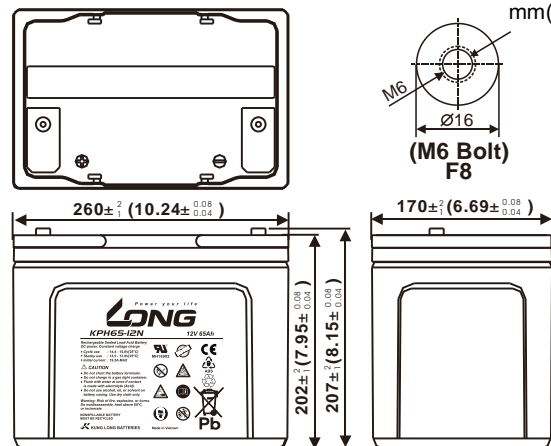
Width (W) 170 ± 0.08 (6.69 ± 0.04)

Height (H) 202 ± 0.08 (7.95 ± 0.04)

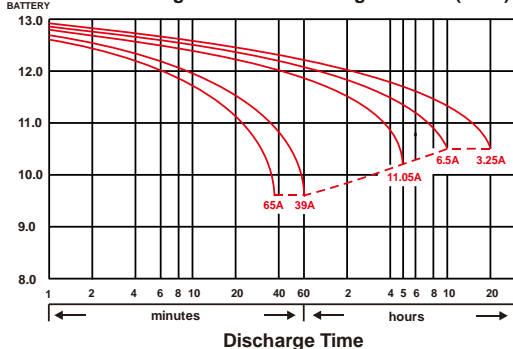
Overall Height (HT) 207 ± 0.08 (8.15 ± 0.04)

Description of torque value of hard ware for the terminals:

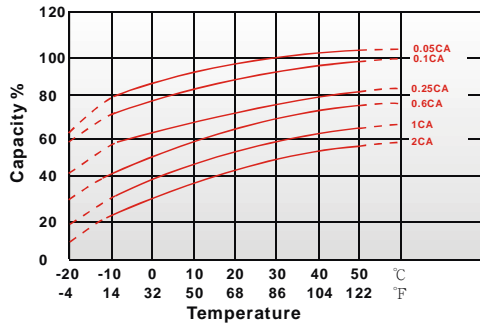
Recommended torque value	M6: 7 N-m (71kgf-cm)
Maximum allowable torque value	M6: 10 N-m (102kgf-cm)



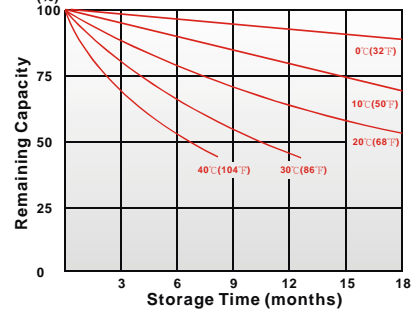
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



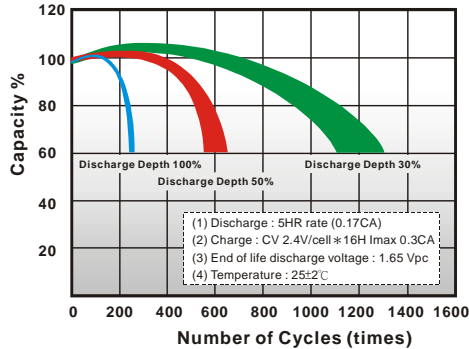
Effect of Temperature on Capacity 25°C(77°F)



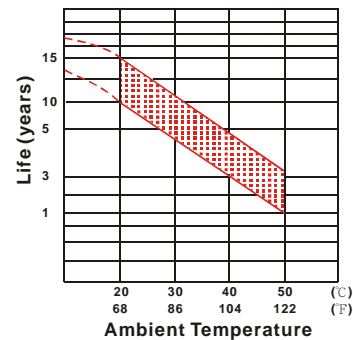
Capacity Retention Characteristic



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	min							
5	min	235	288	315	341	351	362	382
10	min	185	210	228	243	250	257	268
15	min	138	162	175	187	191	196	203
30	min	93.2	105	112	118	121	124	127
60	min	77.8	80.7	81.8	82.7	83.2	83.8	84.7
120	min	47.5	49.3	50.5	51.3	51.8	52.3	52.8
180	min	32.8	34.7	35.8	36.5	36.8	37.2	37.7
240	min	26.8	27.8	28.7	29.3	29.5	29.8	30.2
300	min	23.2	23.5	23.8	24.2	24.3	24.5	24.7
600	min	13.0	13.3	13.5	13.6	13.7	13.7	13.8
1200	min	7.02	7.13	7.23	7.32	7.35	7.40	7.45

- 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	min							
5	min	132	173	195	221	228	236	248
10	min	84.5	108	127	143	148	155	164
15	min	74.2	89.6	97.3	105	108	112	117
30	min	47.4	52.8	56.8	62.5	63.9	66.0	68.2
60	min	33.1	37.9	40.3	41.7	42.2	42.8	43.5
120	min	19.4	22.2	24.1	25.3	25.7	26.2	26.9
180	min	14.7	15.8	17.0	17.9	18.2	18.6	19.1
240	min	13.2	13.7	14.1	14.4	14.5	14.7	14.9
300	min	11.2	11.5	11.7	11.9	12.0	12.1	12.2
600	min	6.32	6.47	6.59	6.68	6.71	6.75	6.80
1200	min	3.41	3.46	3.53	3.58	3.60	3.62	3.65

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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