

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(0.9A	to	10.50V)	18Ah
10 hour rate	(1.71A	to	10.50V)	17.1Ah
5 hour rate	(3.06A	to	10.20V)	15.3Ah
1 C	(18A	to	9.60V)	10.2Ah
3 C	(54A	to	9.60V)	7.2Ah

Weight

Approx. 6.3kg(13.86Lbs.)

Internal Resistance (at 1KHz)

Approx. 10 mΩ

Maximum Discharge Current for

5 seconds: 270A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	5.4A
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	92%
3 month	90%
6 month	80%

Case Material

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

Design Life

3-5 Years.

Terminal

F6

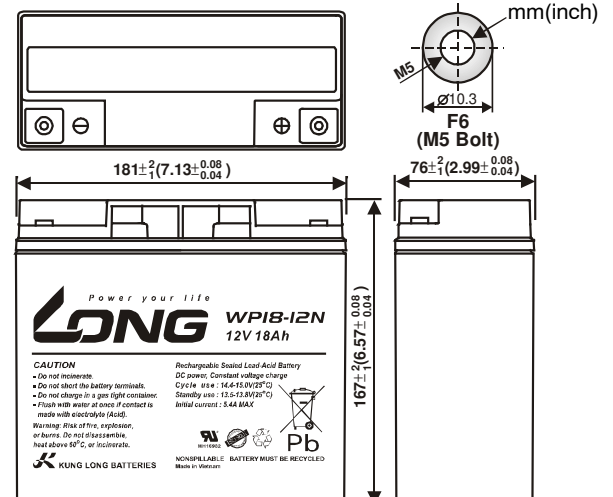


⚡ Dimensions

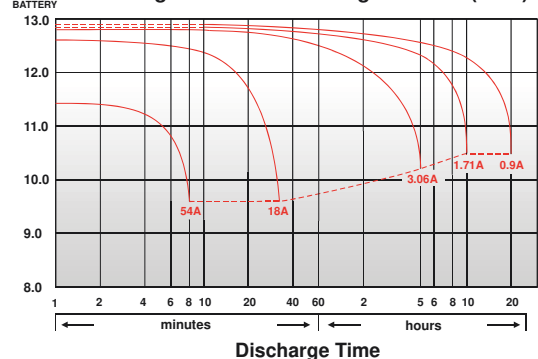
Length (L)	181±2-1 (7.13±0.08-0.04)
Width (W)	76±2-1 (2.99±0.08-0.04)
Height (H)	167±2-1 (6.57±0.08-0.04)
Overall Height (HT)	167±2-1 (6.57±0.08-0.04)

Description of torque value of hard ware for the terminals:

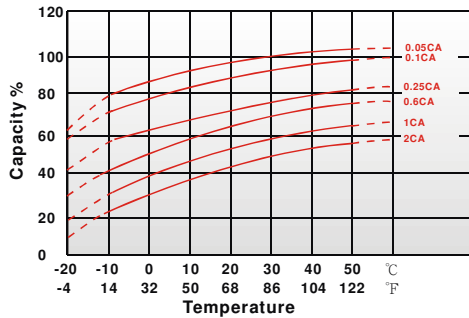
Recommended torque value	M5: 4 N-m (41kgf-cm)
Maximum allowable torque value	M5: 6 N-m (62kgf-cm)



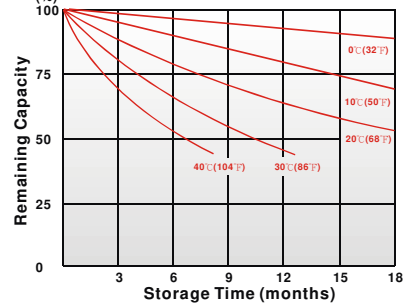
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



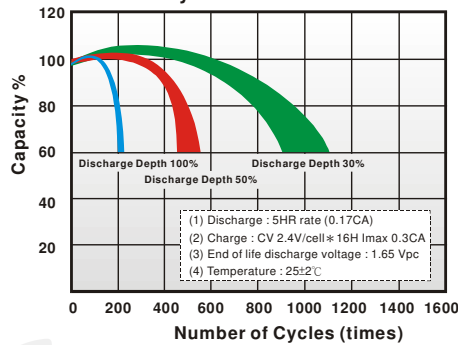
Effect of Temperature on Capacity 25°C (77°F)



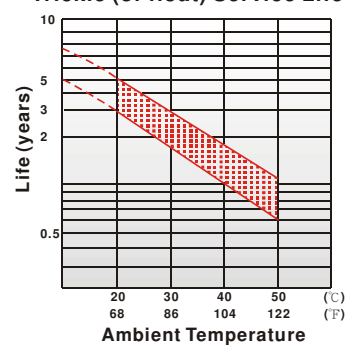
Capacity Retention Characteristic



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	101	118	130	137	139	141	143
10	min	70.7	80.8	88.2	92.7	93.8	95.4	96.6
15	min	61.2	68.5	73.4	76.5	77.3	78.2	79.1
30	min	33.2	35.6	38.2	39.9	40.3	40.8	41.3
60	min	20.3	21.3	22.2	22.8	23.0	23.3	23.7
120	min	11.7	12.3	12.6	13.0	13.1	13.2	13.4
180	min	8.73	9.08	9.32	9.52	9.58	9.67	9.76
240	min	6.87	7.17	7.35	7.50	7.55	7.62	7.70
300	min	5.95	6.18	6.30	6.40	6.43	6.48	6.54
600	min	3.55	3.67	3.75	3.82	3.83	3.87	3.90
1200	min	1.83	1.90	1.95	1.98	2.00	2.02	2.03

- 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	67.0	72.7	76.3	79.5	80.8	82.2	84.6
10	min	40.6	43.8	46.3	48.5	49.4	50.4	52.1
15	min	33.6	36.3	38.0	39.5	40.1	40.8	41.7
30	min	17.6	19.1	20.2	21.1	21.4	21.8	22.3
60	min	10.2	10.8	11.3	11.7	11.8	12.0	12.2
120	min	6.01	6.23	6.37	6.49	6.53	6.58	6.65
180	min	4.34	4.51	4.61	4.69	4.72	4.76	4.82
240	min	3.51	3.60	3.67	3.72	3.74	3.77	3.80
300	min	3.02	3.09	3.14	3.18	3.19	3.21	3.23
600	min	1.76	1.81	1.85	1.88	1.89	1.90	1.91
1200	min	0.939	0.958	0.973	0.984	0.987	0.991	0.995

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%)