

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(1.5A	to	10.50V)	30Ah
10 hour rate	(2.85A	to	10.50V)	28.5Ah
5 hour rate	(5.1A	to	10.20V)	25.5Ah
1 C	(30A	to	9.60V)	17.0Ah
3 C	(90A	to	9.60V)	12.0Ah

#### Weight

Approx. 10.5kg(23.1Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 9 mΩ

#### Maximum Discharge Current for

5 seconds: 600A

#### Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	9A
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.

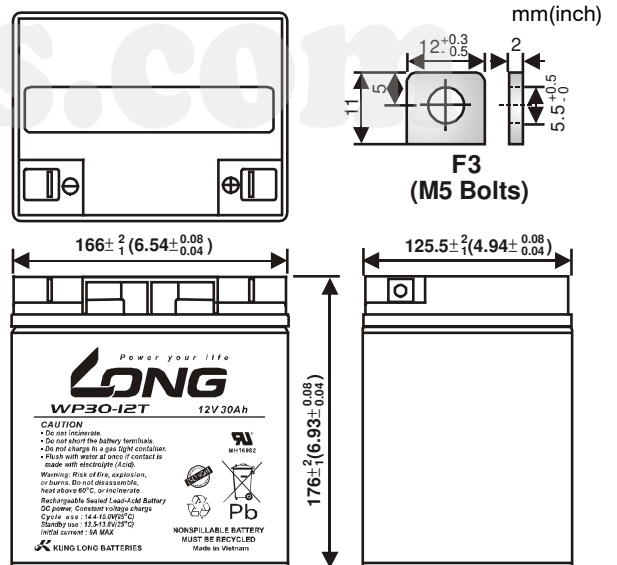
#### Terminal

F3

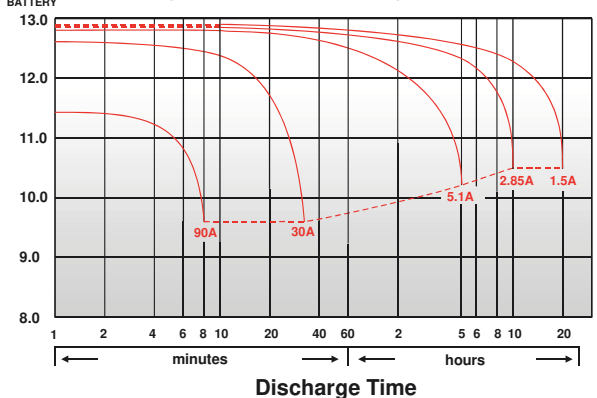


### ⚡ Dimensions

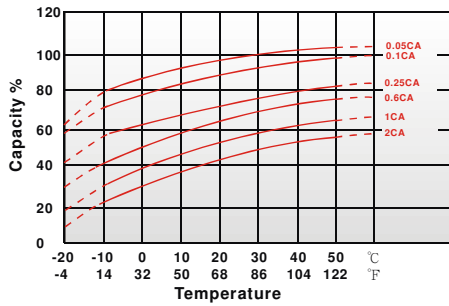
Length (L)	166±2-1 (6.54±0.08-0.04)
Width (W)	125.5±2-1 (4.94±0.08-0.04)
Height (H)	176±2-1 (6.93±0.08-0.04)
Overall Height (HT)	176±2-1 (6.93±0.08-0.04)



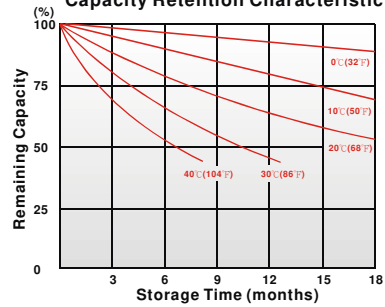
#### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



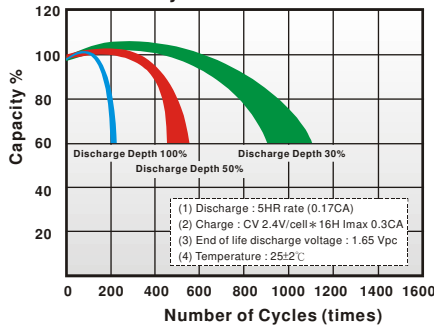
Effect of Temperature on Capacity 25°C (77°F)



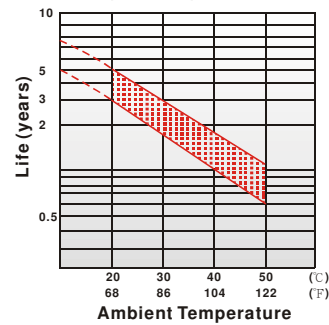
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



### - PERFORMANCE DATA

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

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	141	177	198	209	213	217	222
10	min	108	124	135	142	146	149	153
15	min	94.4	105	110	114	116	117	119
30	min	58.4	63.1	65.0	66.5	66.8	67.4	68.1
60	min	34.4	37.1	38.5	39.5	39.8	40.4	40.9
120	min	20.3	21.7	22.5	23.2	23.3	23.7	24.0
180	min	15.5	16.1	16.4	16.7	16.8	17.0	17.2
240	min	12.7	13.2	13.5	13.7	13.7	13.8	14.0
300	min	10.4	10.9	11.1	12.1	11.3	11.4	11.5
600	min	5.81	6.02	6.17	6.30	6.33	6.39	6.45
1200	min	3.13	3.26	3.33	3.38	3.40	3.44	3.47

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

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	75.3	96.7	110	118	121	124	128
10	min	56.4	65.5	71.8	77.0	78.8	81.0	83.4
15	min	48.6	54.4	57.1	59.7	60.6	61.4	62.7
30	min	29.3	31.8	32.9	33.8	34.1	34.5	34.9
60	min	16.9	18.3	19.2	19.8	20.0	20.2	20.4
120	min	10.4	10.9	11.3	11.6	11.7	11.8	11.9
180	min	7.51	7.83	8.04	8.21	8.28	8.35	8.46
240	min	6.12	6.41	6.54	6.66	6.70	6.74	6.81
300	min	5.09	5.34	5.46	5.55	5.59	5.63	5.68
600	min	2.81	2.92	3.00	3.06	3.08	3.11	3.14
1200	min	1.52	1.57	1.61	1.64	1.65	1.67	1.69

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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