

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

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. 50.5kg(111Lbs.)

Internal Resistance (at 1KHz)

Approx. 4.5 mΩ

Maximum Discharge Current for

5 seconds: 900A

Charging Methods at 25°C(77°F)

Cycle use:		
Charging Voltage	14.4 to 15.0V	
Coefficient	-5.0mV/°C/cell	
Maximum Charging Current :	45A	
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

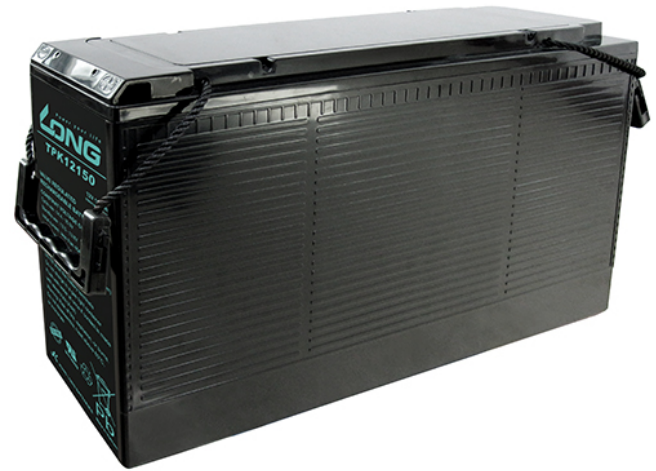
ABS UL94 HB
Option: Flammability resistance of (UL94 V-0)

Design Life

12 Years.

Terminal

F18



⚡ Dimensions

Length (L) 550±3 (21.65±0.12)

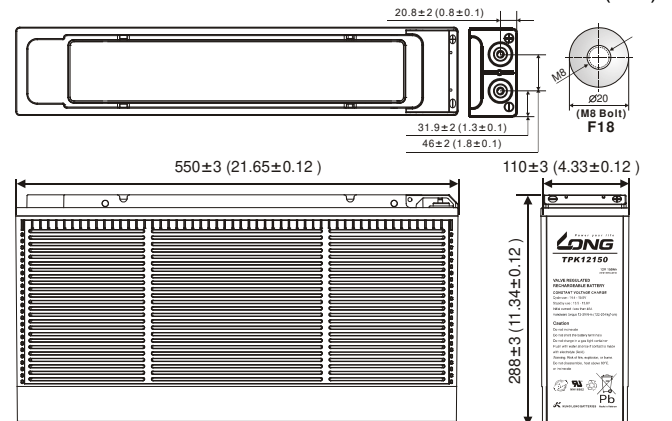
Width (W) 110±3 (4.33±0.12)

Height (H) 288±3 (11.34±0.12)

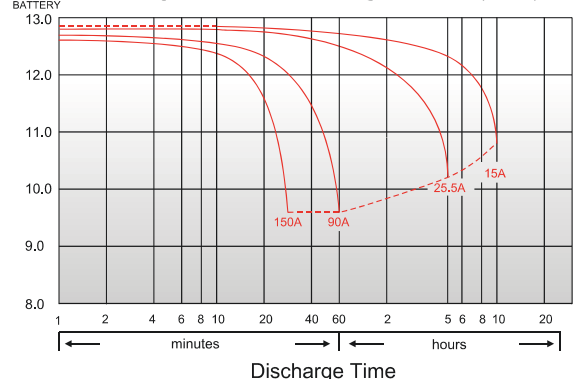
Overall Height (HT) 288±3 (11.34±0.12)

Description of torque value of hard ware for the terminals:

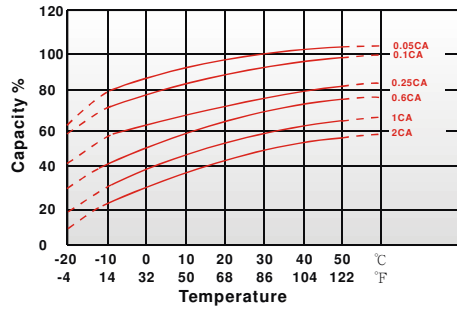
Recommended torque value	M8:12 N-m (122kgf-cm)
Maximum allowable torque value	M8:20 N-m (204kgf-cm)



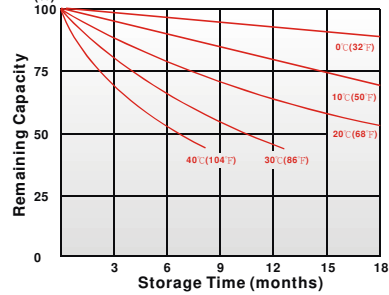
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



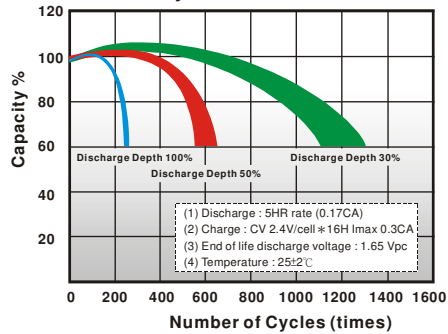
Effect of Temperature on Capacity 25°C (77°F)



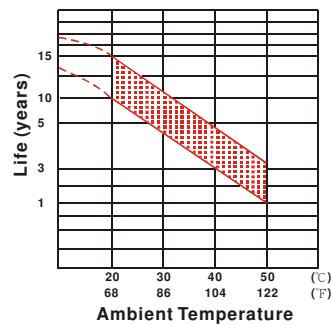
Capacity Retention Characteristic



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
5	min	462	523	580	613	643	680	710
10	min	380	450	505	525	542	557	567
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	98.0	98.8	99.7	101
180	min	70.2	73.8	76.5	78.5	79.2	80.0	80.8
240	min	57.5	60.3	62.2	63.7	64.2	64.8	65.5
300	min	48.8	51.3	53.2	54.3	54.7	55.2	55.7
480	min	35.7	36.7	38.2	39.2	39.5	39.8	40.2
600	min	29.3	31.2	31.8	32.3	32.5	32.7	32.8
1200	min	15.0	15.8	16.4	16.8	17.0	17.2	17.3

- 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
5	min	247	272	334	363	390	415	437
10	min	210	250	282	302	319	334	349
15	min	193	234	261	280	285	291	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	32.4	37.2	39.1	40.5	41.0	41.6	42.3
240	min	27.4	30.1	31.4	32.4	32.7	33.1	33.5
300	min	23.7	25.6	26.6	27.4	27.6	27.9	28.1
480	min	16.6	17.5	18.0	18.3	18.4	18.6	18.7
600	min	14.4	15.0	15.2	15.4	15.6	15.8	16.0
1200	min	7.25	7.50	7.78	7.82	7.90	7.97	8.02

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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