

## WP18-12SHR 12Volt 18Ah

### Specifications

Nominal Voltage(V) **12V**

#### Nominal Capacity

20 hour rate	(0.9A to 10.50V)	<b>18Ah</b>
10 hour rate	(1.71A to 10.50V)	<b>17.1Ah</b>
5 hour rate	(3.06A to 10.20V)	<b>15.3Ah</b>
1 C	(18A to 9.60V)	<b>11.4Ah</b>
3 C	(54A to 9.60V)	<b>7.2Ah</b>

Weight **Approx. 5.6kg(12.32Lbs.)**

Internal Resistance (at 1KHz) **Approx. 10.5 mΩ**

#### Maximum Discharge Current for

5 seconds: **327A**

#### 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 **13.50 to 13.80V**

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	<b>98%</b>
3 month	<b>94%</b>
6 month	<b>85%</b>

Case Material **ABS**

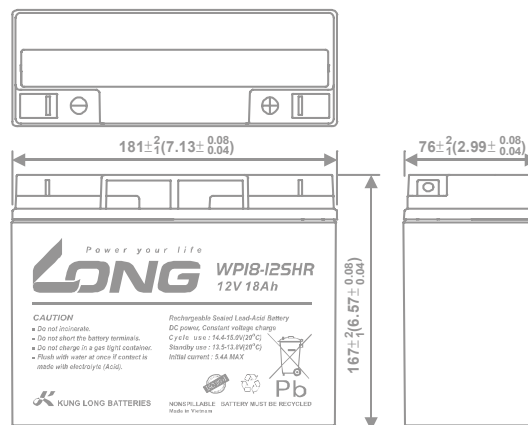
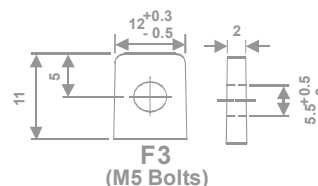
(Option: UL94 HB & UL94 V-0 flame retardant )

Terminal **F3**

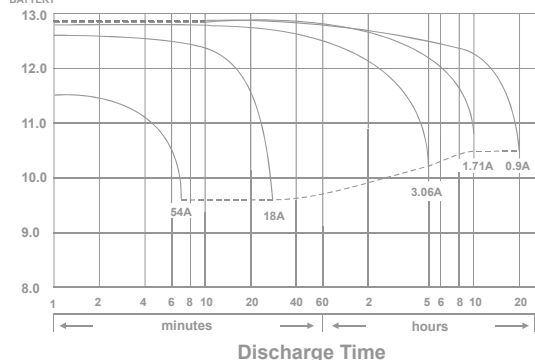


### Dimensions

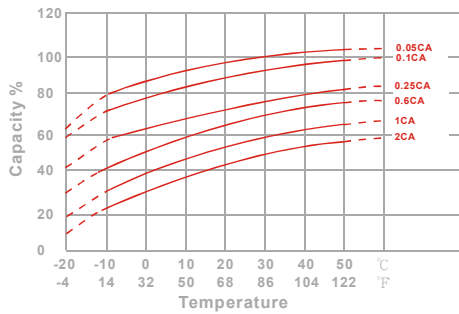
mm(inch)



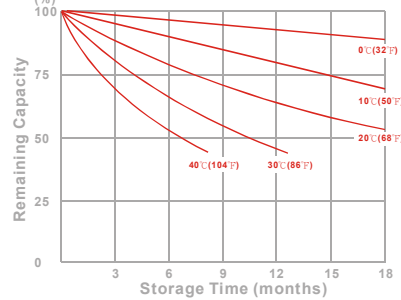
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



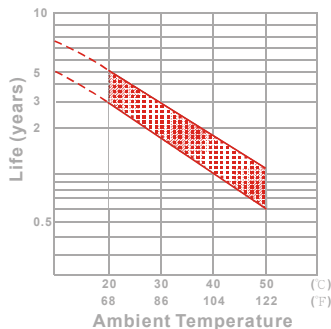
Effect of Temperature on Capacity 25°C(77°F)



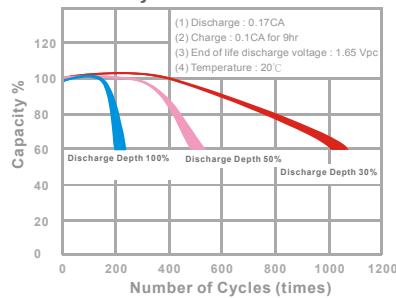
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



## - PERFORMANCE DATA

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

End Voltage		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	774	829	867	885	893	898
10	min	496	532	556	568	573	576
15	min	427	455	474	483	487	490
30	min	227	242	252	257	259	260
60	min	127	129	129	130	131	131
120	min	67.2	67.9	68.2	68.6	68.9	69.3
240	min	43.0	43.5	43.7	43.9	44.1	44.4
300	min	36.6	36.9	37.1	37.3	37.5	37.7
600	min	21.6	21.8	21.9	22.0	22.2	22.3
1200	min	11.4	11.5	11.5	11.6	11.7	11.7

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

End Voltage		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	69.1	74.0	77.4	79.0	79.8	80.2
10	min	43.2	46.2	48.4	49.4	49.9	50.1
15	min	36.4	38.7	40.3	41.1	41.5	41.7
30	min	19.1	20.3	21.2	21.6	21.8	21.9
60	min	10.7	10.8	10.8	10.9	10.9	11.0
120	min	5.60	5.66	5.69	5.71	5.74	5.77
240	min	3.55	3.59	3.61	3.63	3.65	3.67
300	min	3.02	3.05	3.07	3.08	3.10	3.12
600	min	1.78	1.80	1.80	1.81	1.82	1.83
1200	min	0.94	0.95	0.95	0.95	0.96	0.96

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%)