

WP50-12 12Volt 50Ah

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(2.5A	to	10.50V)	50Ah
10 hour rate	(4.75A	to	10.50V)	47.5Ah
5 hour rate	(8.5A	to	10.20V)	42.5Ah
1 C	(50A	to	9.60V)	28.33Ah
3 C	(150A	to	9.60V)	20Ah

Weight Approx. 14.5kg(31.9Lbs.)

Internal Resistance (at 1KHz) Approx. 5 mΩ

Maximum Discharge Current for

5 seconds: 540A

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mV/°C/cell

Maximum Charging Current : 15A

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	98%
3 month	94%
6 month	85%

Case Material ABS

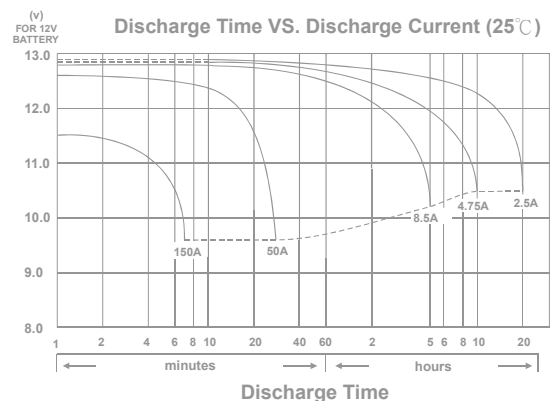
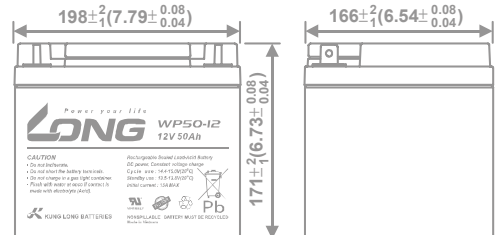
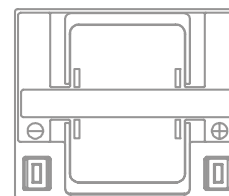
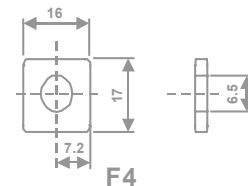
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal F4

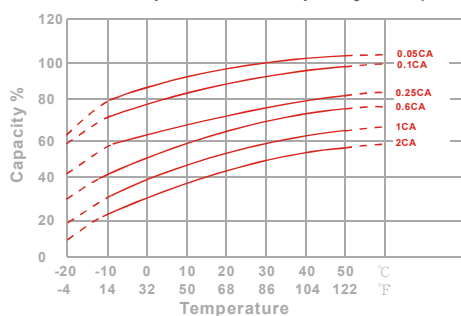


Dimensions

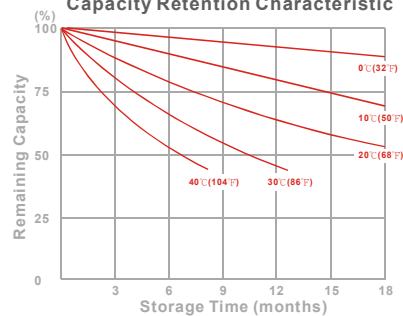
mm(inch)



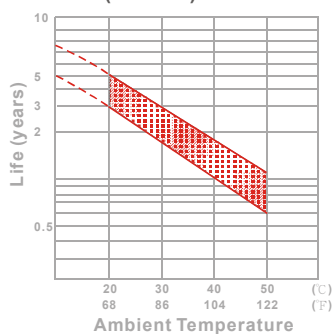
Effect of Temperature on Capacity 25°C(77°F)



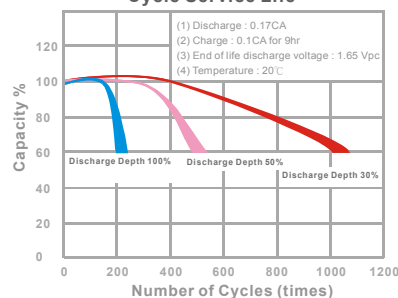
Capacity Retention Characteristic



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	1676	1954	2142	2248	2305	2337
10	min	1057	1232	1351	1418	1454	1474
15	min	781	894	969	1011	1034	1048
30	min	424	486	527	550	562	569
60	min	327	334	339	343	346	347
120	min	173	177	180	182	183	184
180	min	138	141	143	145	146	147
240	min	111	113	115	116	117	118
300	min	94.2	96.1	97.7	98.9	100	100
600	min	55.6	56.8	57.7	58.4	58.9	59.1
1200	min	29.3	29.9	30.4	30.7	31.0	31.1

- 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	154	179	196	206	211	214
10	min	96.1	112	123	129	132	134
15	min	68.8	78.7	85.4	89.1	91.1	92.3
30	min	36.1	41.3	44.8	46.8	47.8	48.5
60	min	27.5	28.0	28.5	28.8	29.1	29.2
120	min	14.4	14.7	15.0	15.1	15.3	15.3
180	min	11.4	11.7	11.9	12.0	12.1	12.2
240	min	9.16	9.35	9.50	9.61	9.69	9.73
300	min	7.78	7.95	8.08	8.17	8.24	8.27
600	min	4.58	4.67	4.75	4.81	4.85	4.86
1200	min	2.41	2.46	2.50	2.53	2.55	2.56

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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