

WP20-12IE 12Volt 20Ah

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity

20 hour rate	(1A	to	10.50V)	20Ah
10 hour rate	(1.9A	to	10.50V)	19Ah
5 hour rate	(3.4A	to	10.20V)	17Ah
1 C	(20A	to	9.60V)	12.67Ah
3 C	(60A	to	9.60V)	8Ah

Weight **Approx. 6.08kg(13.38Lbs.)**

Internal Resistance (at 1KHz) **Approx. 10 mΩ**

Maximum Discharge Current for

5 seconds: **300A**

Charging Methods at 25 (77)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient -5.0mv/ /cell

Maximum Charging Current : **6A**

Standby use:

Float Charging Voltage **13.50 to 13.80V**

Coefficient -3.0mv/ /cell

Operating Temperature Range

Charge **-15 (5) to 40 (104)**

Discharge **-15 (5) to 50 (122)**

Storage **-15 (5) to 40 (104)**

Charge Retention (shelf life) at 20 (68)

1 month **92%**

3 month **90%**

6 month **80%**

Case Material **ABS**

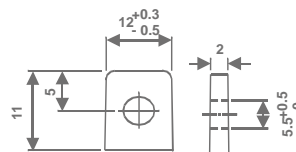
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal **F3**

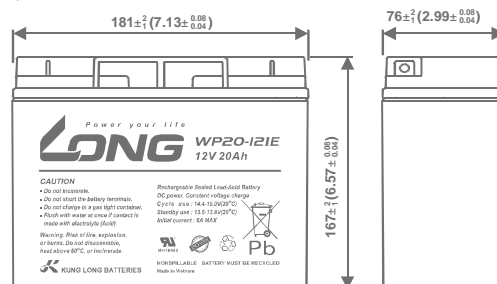
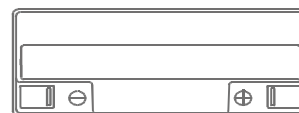


Dimensions

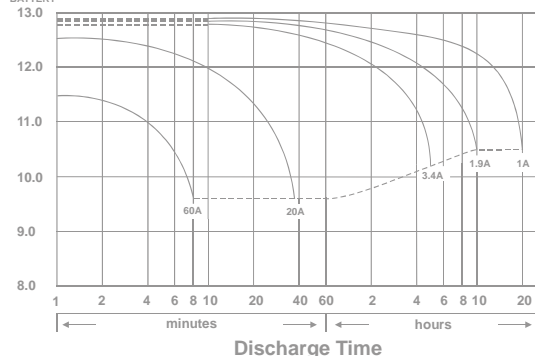
mm(inch)



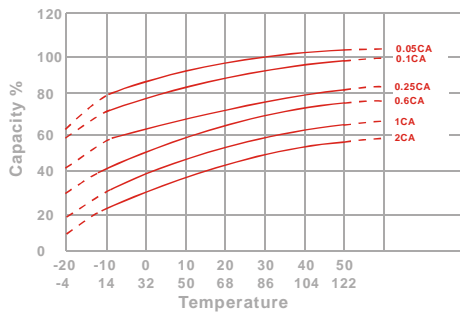
F3
(M5 Bolts)



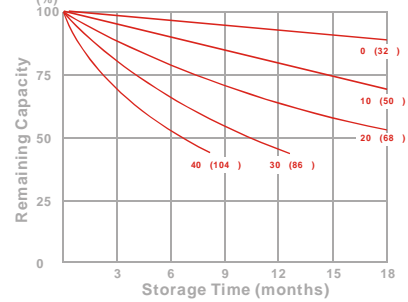
(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25)



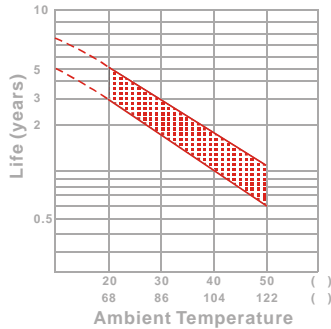
Effect of Temperature on Capacity 25 (77)



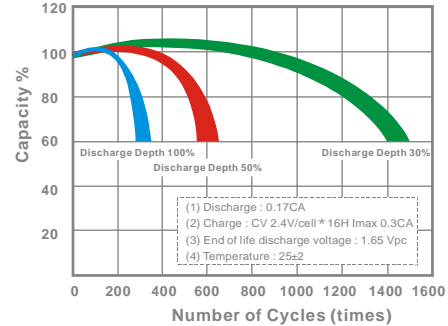
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25 (77)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	648	750	818	860	871	884	896
10	min	463	522	566	592	599	608	615
15	min	387	433	473	491	496	501	506
30	min	209	223	239	248	251	254	256
60	min	133	139	144	148	149	151	153
120	min	73.2	76.4	78.2	80.7	81.3	82.0	82.9
180	min	57.2	59.3	60.7	61.9	62.3	62.8	63.4
240	min	45.8	47.6	48.7	49.6	49.9	50.3	50.8
300	min	39.9	41.3	42.0	42.6	42.8	43.1	43.5
600	min	23.2	23.9	24.4	24.8	24.9	25.1	25.3
1200	min	12.3	12.7	13.0	13.2	13.3	13.4	13.5

- Discharge Rates in Amperes to Various End Voltages at 25 (77)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	68.2	73.9	77.5	80.7	82.0	83.4	85.8
10	min	45.8	48.9	51.4	53.5	54.4	55.4	57.0
15	min	34.7	37.3	39.0	40.5	41.1	41.7	42.6
30	min	18.5	20.0	21.1	22.0	22.2	22.6	23.2
60	min	11.1	11.7	12.2	12.6	12.7	12.9	13.1
120	min	6.25	6.47	6.61	6.73	6.77	6.82	6.89
180	min	4.73	4.90	5.00	5.08	5.11	5.15	5.21
240	min	3.88	3.97	4.04	4.09	4.11	4.14	4.17
300	min	3.41	3.48	3.53	3.57	3.58	3.60	3.62
600	min	1.97	2.00	2.02	2.04	2.05	2.06	2.07
1200	min	1.00	1.03	1.05	1.07	1.08	1.09	1.10

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%),10min X < 60min(+8%~-8%), X 60min(+5%~-5%)