Drypower

LITHIUM IRON PHOSPHATE LIFePO4 RANGE

RECHARGEABLE LITHIUM

3.2V

2.8Ah

LiFePO₄

8.96Wh

IFR26650 P2800

Rechargeable Lithium Iron Phosphate Battery

SPECIFICATIONS			
Nominal Voltage	3.2V		
Nominal Capacity	2800mAh		
Watt-hour	8.96Wh		
Cycle Life (Capacity ≥80%)	≥2000 cycles		
Charge Current			
Standard Max 10~60°C Max -10~10°C Charge Cut-off Voltage	560mA (0.2C) 14000mA (5C) 560mA (0.2C) 3.65V		
Discharge Current	560mA (0.2C)		
Discharge Cut-off Voltage	2.0V		
Maximum Discharge Current			
Max continuous discharge Max pulse discharge	42000mA (15C) 84000mA (30C, 3s)		
Internal Resistance	≤10mΩ		
Operating Temperature			
Charge Discharge Storage (1 month) Storage (3 months) Storage (6 months)	-10°C ~ +60°C -20°C ~ +60°C -20°C ~ +45°C -20°C ~ +35°C -20°C ~ +25°C		
Operating Humidity Range	45% – 85%		
Dimensions			
	00.4 : 0.4		
Diameter (D) Height (H) Weight	26.4 ± 0.1mm 65.9 ± 0.1mm 90g		

DIMENSIONS





CAPACITY TEST

- 1. Test purpose: Electrical performance test
- 2. Test equipment: HT-512CD; Voltage & IR Tester BS-VR3
- 3. Test condition: Temperature: 20°C±5°C; relative humidity: 45%~85%
- 4. Test method:
 - 1. 1400mA CA discharge to 2.0V, hold for 10min;
 - 2. 560mA CA charge to 3.65V, then 3.65V CV charge to current 28mA, hold for 10 min;
 - 3. 560mA CA discharge to 2.0V.
- 5. Qualified standard: Initial IR≤10m ohm; 0.2C Discharge C≥2800mAh.

Cell#	IR	Voltage	0.2C Capactiy	Conclusion	
Cell#	(mΩ)	(mV)	(mAh)		
1#	5.99	3.2815	2830	Qualified	
2#	5.98	3.2801	2841	Qualified	
3#	6.22	3.2798	2842	Qualified	
4#	5.94	3.2694	2858	Qualified	
5#	5.96	3.2798	2834	Qualified	
6#	5.94	3.2804	2833	Qualified	
7#	6.24	3.2801	2832	Qualified	
8#	6.26	3.28	2840	Qualified	
9#	6.25	3.2793	2826	Qualified	
10#	6.23	3.2789	2837	Qualified	
11#	6.23	3.2792	2831	Qualified	
12#	6.23	3.2795	2848	Qualified	
13#	6.23	3.2801	2848	Qualified	
14#	6.31	3.2802	2841	Qualified	
15#	6.25	3.2809	2847	Qualified	
16#	6.21	3.2816	2845	Qualified	
17#	5.96	3.28	2850	Qualified	
18#	5.95	3.28	2841	Qualified	
19#	6.22	3.281	2851	Qualified	
20#	6.24	3.2819	2846	Qualified	
21#	6.21	3.2817	2845	Qualified	
22#	5.94	3.2802	2837	Qualified	
23#	5.95	3.2797	2831	Qualified	
24#	6	3.2802	2851	Qualified	
Average value	6.12	3.28	2841	/	
Maximum	6.31	3.282	2858	/	
minimum	5.94	3.269	2826	/	
range	-0.19	-0.002	-17	/	

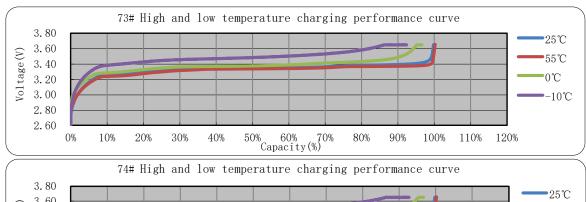
Cell#	IR	Voltage	0.2C Capactiy	Conclusion	
Cell#	(mΩ)	(mV)	(mAh)	Conclusion	
25#	6.19	3.3	2859	qualified	
26#	6.18	3.3	2849	qualified	
27#	6.26	3.3	2857.6	qualified	
28#	6.24	3.3	2849.2	qualified	
29#	5.97	3.3	2848.5	qualified	
30#	6.21	3.3	2845.4	qualified	
31#	6.18	3.3	2831.7	qualified	
32#	6.24	3.3	2842.5	qualified	
33#	6.11	3.3	2847.9	qualified	
34#	6.15	3.3	2853.4	qualified	
35#	6.24	3.3	2849.9	qualified	
36#	6.22	3.3	2841.8	qualified	
37#	6.26	3.3	2851	qualified	
38#	6.2	3.3	2840.4	qualified	
39#	6.12	3.3	2851	qualified	
40#	6.28	3.3	2844.9	qualified	
41#	6.29	3.3	2841.5	qualified	
42#	6.19	3.3	2842.8	qualified	
43#	6.11	3.3	2847.3	qualified	
44#	6.18	3.3	2827.7	qualified	
45#	6.16	3.3	2839	qualified	
46#	6.01	3.3	2833.3	qualified	
47#	5.95	3.3	2840.4	qualified	
48#	5.97	3.3	2819.3	qualified	
49#	6.03	3.3	2833.1	qualified	
50#	6.14	3.3	2828.8	qualified	
Average value	6.157	3.3	2843	qualified	
Maximum	6.29	3.3	2859	qualified	
minimum	5.95	3.3	2819	qualified	
range	0.34	0	40	qualified	

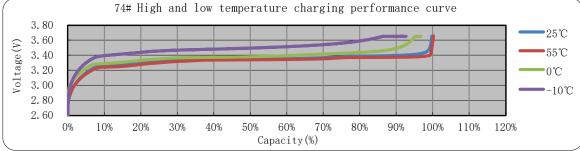
	IR	Voltage	0.2C Capactiy	Conclusion	
Cell #	(mΩ)	(mV)	(mAh)		
51#	6.02	3.3	2844.2	Qualified	
52#	6.01	3.3	2852.1	Qualified	
53#	5.99	3.3	2847.3	Qualified	
54#	6.25	3.3	2840.4	Qualified	
55#	5.98	3.3	2833.7	Qualified	
56#	5.98	3.3	2843.8	Qualified	
57#	6.27	3.3	2850.4	Qualified	
58#	6.28	3.3	2855.2	Qualified	
59#	6.27	3.3	2840.6	Qualified	
60#	5.99	3.3	2846.4	Qualified	
61#	6.27	3.3	2830.6	Qualified	
62#	6.28	3.3	2846	Qualified	
63#	6.08	3.3	2840.6	Qualified	
64#	6.1	3.3	2827.7	Qualified	
65#	6	3.3	2831.6	Qualified	
66#	5.91	3.3	2848.5	Qualified	
67#	5.91	3.3	2835.3	Qualified	
68#	6.2	3.3	2847.3	Qualified	
69#	6.19	3.3	2831.3	Qualified	
70#	6.22	3.3	2840.3	Qualified	
71#	6.18	3.3	2846.7	Qualified	
72#	6.24	3.3	2836.4	Qualified	
Average value	6.119	3.3	2842	Qualified	
Maximum	6.28	3.3	2855	Qualified	
minimum	5.91	3.3	2828	Qualified	
range	0.37	0	28	Qualified	

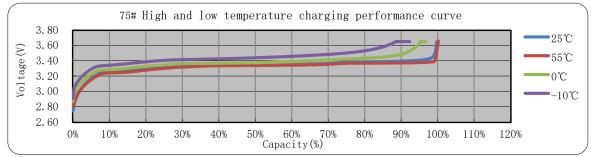


HIGH & LOW TEMPERATURE CHARGE

1. Test Data







2. Comprehensive judgement

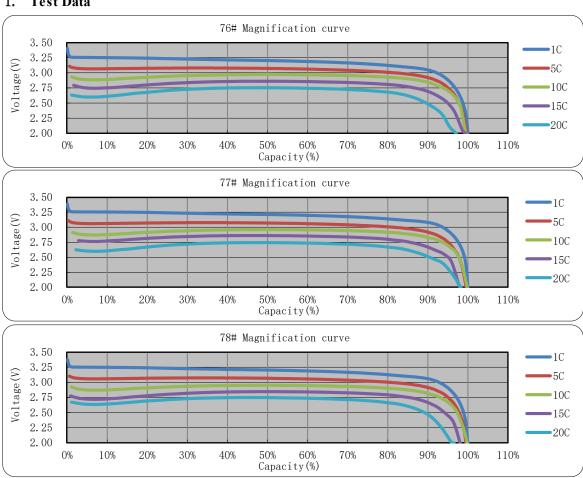
No.	25°C	55°C	0°C	-10°C	Cha	rging efficie	Recharge	Dogu14	
NO.	charge	charge	charge	charge	25°C %	55°C %	0°C %	10℃	Result
73#	2816	2823	2721	2601	100.0%	100.2%	96.6%	92.4%	Passed
74#	2818	2825	2725	2613	100.0%	100.2%	96.7%	92.7%	Passed
75#	2824	2830	2733	2608	100.0%	100.2%	96.8%	92.4%	Passed

- 3. Test Instrument: CT-4008-5V12A-S1; BELL high and low temperature box
- 4. Test condition: 25°C/55°C/0°C/-10°C; Relative humidity: 45%~85%
- 5. Test Method:
 - $1 \cdot (25^{\circ}\text{C})0.5\text{C}$ CA discharge to 2.0V;
 - $2 \cdot (25^{\circ}\text{C}/55^{\circ}\text{C}/0^{\circ}\text{C}-10^{\circ}\text{C})$ hold for 6h seperately;
- $3\$ (25°C/55°C/0°C/-10°C) Charge at 0.33c/0.3c/0.1c/0.1c constant current to 3.65v, turn to 3.65v constant voltage to 0.05c.
- **6. Qualification criteria:** (25°C/55°C/0°C/-10°C Charge C/ Rated C) *100% no less than 100%/98%/90%/80%



RATE TEST

Test Data



Comprehensive judgement

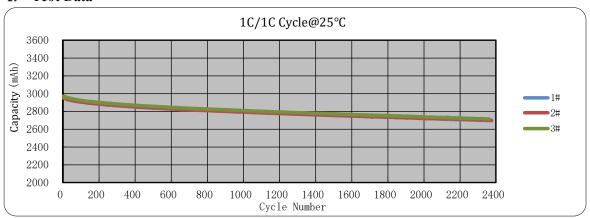
No	1C	5C	10C	15C	20C	5	10C	15C	20C	Conclusi
INO	discharge	on								
76#	2884	2875	2878	2870	2800	99.7%	99.8%	99.5%	97.1%	qualified
77#	2883	2871	2878	2835	2831	99.6%	99.8%	98.3%	98.2%	qualified
78#	2868	2859	2862	2812	2769	99.7%	99.8%	98.1%	96.6%	qualified

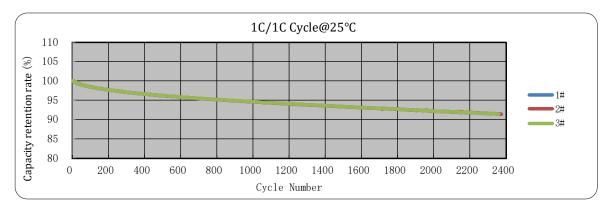
- Test Instrument: CT-4008-5V12A-S1;
- **Test condition:** $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative humidity: $45\% \sim 85\%$
- Test Method:
 - 1, 0.5C CA charge to 3.65V, then 3.65V CV charge to 0.05C current;
 - 2、1C/5C/10C/15C/20C CA discharge to 2.0V.
- 6. Qualification standard: 1C/5C/10C/15C/20C discharge Efficiency no less than 100%/95%/90%/85%/80%



ROOM TEMPERATURE CYCLE TEST

1. Test Data





2. Comprehensive judgement

No.	Initial capacity	cycles	Retention rate
110#	2952	2375	91.37%
111#	2954	2373	91.41%
112#	2971	2364	91.41%

- 3. Test Instrument: Newell test system CT-4008-5V12A-S1
- 4. **Test condition:** $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative humidity: $45\% \sim 85\%$
- 5. Test method:
- 1) 0.5C CA discharge to 2.0V, hold for 10 min;
- 2) 1C CA Charge to 3.65V, then 3.65V CV charge to 0.05C current, cut off and hold for 10min
- 3) 1C CA discharge to 2.0V, hold for 10min;
- 4) Repeat step 2) to step 3), 2000 cycles
- **6. Qualification standard:** after 2000 cycles, capacity retention rate >80%.