

Cell Solutions for Powerful EV Performance

Cells

LG Energy Solution's high-energy-density and high-power cell lineups maximize EV performance, while battery design freedom caters to a range of customer EV concepts.

Category			Power Cell		Energy Cell		
Model			P41	JP3	E101A	N2.2	E72B
Chemistry			NCM/ Graphite	NCM/ Graphite	NCM/ Graphite	NCM/ Graphite	NCMA/ Graphite+SiO
Performance	Capacity (Min, 25℃, 0.3C)	Ah	40.8	62.4 (Min, 25℃, 0.5C)	101.8	64.8	72.2
	Nominal Voltage	Vdc	3.63	4	3.67	3.634	3.67
	Energy	Wh	148	229.6 Wh (Min.)	374	235	264
	Energy	Wh/L	486	389 Wh/L (Min.)	637	556	625
	Density (Min)	Wh/kg	226	184 Wh/kg (Min.)	287	266	287
	Pulse Charge Max Current(A)* (10sec, SoC 50%, 25℃, BOL)		380	192	395	146	316
	Pulse Discharge Max Current(A)* (10sec, SoC 50%, 25℃, BOL)		380	192	590	146	550
	Continuous Discharge Performance* (SoC 100%→0%)		5C, 12min, 25℃	-	-	-	3C, 10.1min, 25℃
	Max Discharge Power (W)	10sec, SoC 50%, 25℃	1241	706.5	1174	531	1540
	Internal Resistance (mΩ)	10sec, SoC 50%, 25℃	1.28	0.88 ± 0.25 mOhm	1.05-1.45 (10sec, SoC 28% (Shipping), 23℃)	1.2-1.9 (10sec, SoC 28% (Shipping), 23℃)	1.09
	Power to Energy Ratio	W(Power: 10sec, SoC 50%, 25℃) /Energy	8.3	-	3.1	2.3	5.8
	Quick Charge		8-80% @30-40min				
Warranty			80% Capacity retention @8years, passenger car condition				
Dimension	L*W*T(mm)		266.5*139 *8.22	353.5*101.7 *16.4	580*112.4 *9	301.5*100.7 *14.0	354*101.65 *11.44
Weight	g		654.5	1245	1303	885	906
Operating Temperature (℃)			-30 ~ 55				
Storage Temperature (℃)			-30 ~ 60				
Mass Production			Poland('21-)~	China('18-)~	China/ Poland('23-)~	Korea/ USA('23-)~	Poland('23-)~

* As just reference data of cell level test, the detailed values can be modified upon system specification such as derating logic, cooling performance, etc. Concrete values can be specified based on customer's definition of its value.

Energy Cell					Low Voltage Cell	HEV Cell
E65D	E66C	E78	E79	E56A	LV 9.8	H5.5
NCM/ Graphite	NCM/ Graphite	NCM/ Graphite	NCMA/ Graphite	NCM/ Graphite	NCM/ Graphite + LTO	NCM/ Graphite
64.5	65.4	78	78	56	9.8	5.5
3.66	3.68	3.67	3.69	3.66	3.67	3.68
236	240	286	287	205	36	20.24
444	575	602	591	512.5	195.6	232.3
234	266	265	267	238.9	113.3	135.8
300	110	184	202	200	275	750w Pulse Charge Max Power(w)* (10sec, SoC50%, 25°C, BOL)
400	330	496	546	400	400	750w Pulse Discharge Max Power(w)* (10sec, SoC 50%, 25°C, BOL)
2C, 21min, 25°C	3C, 20min, 25°C	3C, 11.3min, 45°C	3C, 17.3min, 45°C 3C, 12.4min, 25°C	-	-	-
1260	1068	1463	1365	1000	1000	-
1.2	1.42	1.48	1.27	1.57	1.7	-
5.3	4.45	5	4.7	4.9	27.8	-
8~80% @30~40min				-	-	-
80% Capacity retention @8years, passenger car condition						
290.5*159 *11.5	354*101.05 *11.66	548*100 *8.65	548*100.1 *8.55	354*101.05 *11.18	112.0*246.5 *6.66	180*105 *4.61
1017	900	1083	1075	863	317.5	149
					-30 ~ 60	
						-40 ~ 70
Korea('21~)	Poland/ China('20~)	Poland('19~)	Poland('23~)	China('21~)	China('17~)	China('17~)/ Poland('24~)

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