

18.3 × 65 mm
48 g



LG · released 2013

NMC

MOOCH-TESTED · 20 A

CAPACITY

MOOCH CONTINUOUS

NOMINAL · 2.5 – 4.2 V

ENERGY · 159.79 WH/KG

This information is gathered from multiple sources, including manufacturer datasheets, independent third-party testing, and community contributions. Cell specifications vary between production batches and change over time, and no figure here is guaranteed to be correct or current. **Always consult the manufacturer's spec sheet directly.** Use this sheet for reference only — never as the sole basis for a safety-critical decision about charging, discharging, or assembling cells. The cell image is an illustrative render generated from published specifications, not a photograph.

Lowest in database

Higher discharge than 91% of 18650 cells in our database. Great for high-drain builds.

Cutoff 2.5 V

Nominal 3.65 V

Max 4.2 V

Below nominal the cell sags fast under load; above it, the last of the capacity fills slowly on the constant-voltage taper.

Rule-of-thumb ratings from this cell's capacity and continuous discharge. Check your own load before committing.

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|---------------------|---|
| ● Powerwalls | Usable for powerwalls but lower capacity means you'll need more cells to hit your target kWh. |
| ● Ebike packs | Marginal. Check your motor's peak draw first. You might get voltage sag under load. |
| ● Car audio | Enough discharge to handle amplifier bursts without voltage sag. |
| ● High-drain vaping | Usable in regulated mods at moderate wattage. Not recommended for mechanical mods. |
| ● Flashlights | Lower capacity means shorter runtime. Better cells are available for flashlight use. |
| ● Power tools | Sufficient discharge and capacity for most power tool packs. |

IDENTITY

Manufacturer	LG
Model	LGDAHD2C1865
Format	18650
Chemistry	NMC
Year released	2013
Wrap colour	Peach
Insulator	White
Terminal	Flat top
Protection	Unprotected

OPERATING TEMPERATURE

Charging	0°C to 50°C
Discharging	-20°C to 70°C

ENERGY & POWER DENSITY

Energy	7.67 Wh
Specific energy	159.79 Wh/kg
Volumetric density	448.63 Wh/L
Power density (mass)	1,521 W/kg
Power density (volume)	4,270 W/L
Capacity ranking	#123 of 169 18650s

PHYSICAL

Diameter	18.3 mm
Length	65 mm
Weight	48 g

ELECTRICAL

Rated capacity	2,100 mAh
Nominal voltage	3.65 V
Max charge voltage	4.2 V
Discharge cutoff	2.5 V
Energy	7.67 Wh
Internal resistance	20 mΩ
Max continuous discharge	20 A (mooch)
Discharge C-rate	9.5C
Standard charge current	1,050 mA
Typical charge time	2 h
Standard discharge	420mA

C-RATE CONVERSION · 2,100 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	0.42 A	5h 00m
0.5C	1.05 A	2h 00m
1C	2.1 A	1h 00m
2C	4.2 A	30m
3C	6.3 A	20m
5C	10.5 A	12m

8C	16.8 A	7m 30s
10C	21 A	6m

Highlighted row is closest to the rated 20 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,050 mA	~2h 00m
1C	2,100 mA	~1h 00m

Constant-current phase only. Real charge time runs longer because of the constant-voltage taper at the end.

SERIES PACK CONFIGURATIONS

Voltages calculated from this cell's own nominal and maximum charge voltage. The 3P columns show one common parallel count as a worked example — scale the parallel group to the capacity you need.

SERIES	NOMINAL	FULLY CHARGED	CELLS AT 3P	CAPACITY	ENERGY
3S	11 V	12.6 V	9	6.3 Ah	69 Wh
7S	25.6 V	29.4 V	21	6.3 Ah	161 Wh
10S	36.5 V	42 V	30	6.3 Ah	230 Wh
13S	47.4 V	54.6 V	39	6.3 Ah	299 Wh
14S	51.1 V	58.8 V	42	6.3 Ah	322 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.6 V 4,200 mAh · 107 Wh 40 A max · ≈0.67 kg cells	13S4P 48V ebike standard 52 cells · 47.4 V 8,400 mAh · 399 Wh 80 A max · ≈2.5 kg cells	16S4P DIY powerwall 64 cells · 58.4 V 8,400 mAh · 491 Wh 80 A max · ≈3.07 kg cells	4S6P Power tool replacement 24 cells · 14.6 V 12,600 mAh · 184 Wh 120 A max · ≈1.15 kg cells
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SIMILAR CELLS

Same format and chemistry, within ± 500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
LG LGDAHD2C1865 (this cell)	2,100	20 A	7.67	48 g	160
LG LGDB118650	2,600	—	9.8	—	—
LG LGDBB11865	2,600	—	9.8	—	—
BAK C18650CC	2,600	2 A	9.6	—	—
Cham CMICR18650F	2,600	—	9.6	45.5 g	211
GP Batteries ICR18650-26F	2,600	5 A	9.6	—	—

HANDLING & SAFETY

- Never charge above 4.2V or discharge below 2.5V.
- Store cells at around 3.6-3.8V (roughly 40-60% charge) for long-term storage.
- Don't mix cells with different capacities, chemistries, or states of charge in a pack.
- Inspect wraps before use. A torn wrap can cause a short circuit.
- Always use a BMS or balance charger appropriate for your pack configuration.
- Keep cells away from metal objects, keys, and coins. A short across the terminals can cause fire.

SOURCES & FURTHER READING

Cell Saviors page	cellsaviors.com/cell-database/lg-lgdahd2c1865
Manufacturer datasheet	https://www.dnkpowers.com/wp-content/uploads/2022/07/LG-ICR1865...
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/lg-hd2c-20a-2100mah-...
Full cell database	cellsaviors.com/cell-database