

Illustrative render generated from published specifications

18.29 × 65.05 mm
46.1 g

LG LGDA418650

LG
18650 NMC



Live page & updates

2,400 mAh CAPACITY	4.8 A RATED CONTINUOUS	3.6 V NOMINAL · 3 – 4.2 V	8.64 Wh ENERGY · 187.42 WH/KG
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REFERENCE ONLY — NOT AN OFFICIAL DOCUMENT

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.

CAPACITY AMONG 18650S #71 of 169 Lowest in databaseHighest A mid-range 18650 cell. Solid for builds that don't need extreme capacity or discharge.	VOLTAGE OPERATING WINDOW 1.2 V usable Cutoff 3 VNominal 3.6 VMax 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.
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APPLICATION SUITABILITY

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

Powerwalls	Usable for powerwalls but lower capacity means you'll need more cells to hit your target kWh.
Ebike packs	Not enough discharge for ebike use. Voltage sag would be a problem under load.
Car audio	Not enough discharge for car audio amplifiers. You need at least 15-20A continuous for most setups.
High-drain vaping	Below the 25A Mooch CDR threshold that high-drain vaping needs. Use a higher-drain cell.
Flashlights	Lower capacity means shorter runtime. Better cells are available for flashlight use.
Power tools	Not enough discharge or capacity for power tool use.

IDENTITY		PHYSICAL	
Manufacturer	LG	Diameter	18.29 mm
Model	LGDA418650	Length	65.05 mm
Format	18650	Weight	46.1 g
Chemistry	NMC	ELECTRICAL	
Wrap colour	Yellow	Rated capacity	2,400 mAh
Insulator	White	Nominal voltage	3.6 V
Terminal	Flat top	Max charge voltage	4.2 V
Protection	Unprotected	Discharge cutoff	3 V
OPERATING TEMPERATURE		Energy	8.64 Wh
Charging	0°C to 45°C	Max continuous discharge	4.8 A (datasheet)
Discharging	-20°C to 60°C	Discharge C-rate	2C
ENERGY & POWER DENSITY		Standard charge current	1,150 mA
Energy	8.64 Wh	Typical charge time	2.1 h
Specific energy	187.42 Wh/kg	Standard discharge	480mA
Volumetric density	505.53 Wh/L		
Power density (mass)	375 W/kg		
Power density (volume)	1,011 W/L		
Capacity ranking	#71 of 169 18650s		
C-RATE CONVERSION · 2,400 MAH			
C-RATE	CURRENT	THEORETICAL RUNTIME	
0.2C	0.48 A	5h 00m	
0.5C	1.2 A	2h 00m	
1C	2.4 A	1h 00m	
2C	4.8 A	30m	

Highlighted row is closest to the rated 4.8 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,200 mA	~2h 00m
1C	2,400 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	10.8 V	12.6 V	9	7.2 Ah	78 Wh
7S	25.2 V	29.4 V	21	7.2 Ah	181 Wh
10S	36 V	42 V	30	7.2 Ah	259 Wh
13S	46.8 V	54.6 V	39	7.2 Ah	337 Wh
14S	50.4 V	58.8 V	42	7.2 Ah	363 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 4,800 mAh · 121 Wh 10 A max · ≈0.65 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 9,600 mAh · 449 Wh 19 A max · ≈2.4 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 9,600 mAh · 553 Wh 19 A max · ≈2.95 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 14,400 mAh · 207 Wh 29 A max · ≈1.11 kg cells
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SIMILAR CELLS

Same format and chemistry, within ± 500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
LG LGDA418650 (this cell)	2,400	4.8 A	8.64	46.1 g	187
Panasonic NCR18650PD	2,900	10 A	10.7	44.5 g	241
LG LGABC11865	2,800	—	10.5	—	—
LG LGDC118650	2,800	4.1 A	10.5	47 g	223
Samsung ICR18650-28A	2,800	5.6 A	10.5	48 g	219
Samsung INR18650-29E	2,900	5 A	10.5	48 g	219

HANDLING & SAFETY

- Never charge above 4.2V or discharge below 3V.
- 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 Savors page	cellsaviors.com/cell-database/lg-lgda418650
Manufacturer datasheet	https://www.scribd.com/document/85353779/LG-2400mAh-ICR18650-A...
Full cell database	cellsaviors.com/cell-database