

Illustrative render generated from published specifications

LG LGDAS31865

LG · also sold as ICR18650S3

18650

NMC



Live page & updates

2,200 mAh CAPACITY	— A RATED CONTINUOUS	3.6 V NOMINAL · 3 – 4.2 V	7.92 Wh ENERGY
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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 #87 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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IDENTITY

Manufacturer	LG
Model	LGDAS31865
Also sold as	ICR18650S3
Format	18650
Chemistry	NMC
Wrap colour	Blue
Insulator	White

ENERGY & POWER DENSITY

Energy	7.92 Wh
Capacity ranking	#87 of 169 18650s

ELECTRICAL

Rated capacity	2,200 mAh
Nominal voltage	3.6 V
Max charge voltage	4.2 V
Discharge cutoff	3 V
Energy	7.92 Wh
Internal resistance	75 mΩ
Standard charge current	1,075 mA
Typical charge time	2 h
Standard discharge	430mA

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,100 mA	~2h 00m
1C	2,200 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	6.6 Ah	71 Wh
7S	25.2 V	29.4 V	21	6.6 Ah	166 Wh
10S	36 V	42 V	30	6.6 Ah	238 Wh
13S	46.8 V	54.6 V	39	6.6 Ah	309 Wh
14S	50.4 V	58.8 V	42	6.6 Ah	333 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 4,400 mAh · 111 Wh	13S4P 48V ebike standard 52 cells · 46.8 V 8,800 mAh · 412 Wh	16S4P DIY powerwall 64 cells · 57.6 V 8,800 mAh · 507 Wh	4S6P Power tool replacement 24 cells · 14.4 V 13,200 mAh · 190 Wh
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SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
LG LGDAS31865 (this cell)	2,200	—	7.92	—	—
Panasonic NCR18650D	2,700	5.1 A	10	—	—
Sanyo UR18650ZT	2,650	5.3 A	9.8	46 g	213
LG LGDB118650	2,600	—	9.8	—	—
LG LGDBB11865	2,600	—	9.8	—	—
Sanyo UR18650ZTA	2,620	5.8 A	9.7	48 g	202

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 Saviors page	cellsaviors.com/cell-database/lg-lgdas31865
Full cell database	cellsaviors.com/cell-database