

Illustrative render generated from published specifications

18.3 × 65 mm
45 g

Lei INR-18650-CE

Lei

18650 NMC



Live page & updates

2,200 mAh CAPACITY	— A RATED CONTINUOUS	3.6 V NOMINAL · 2.5 – 4.2 V	7.92 Wh ENERGY · 176 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

#170 of 279

Lowest in databaseHighest

A mid-range 18650 cell. Solid for builds that don't need extreme capacity or discharge.

VOLTAGE OPERATING WINDOW

1.7 V usable

Cutoff 2.5 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.

IDENTITY		PHYSICAL	
Manufacturer	Lei	Diameter	18.3 mm
Model	INR-18650-CE	Length	65 mm
Format	18650	Weight	45 g
Chemistry	NMC	ELECTRICAL	
Wrap colour	☒ Green		
Insulator	☐ White		
ENERGY & POWER DENSITY		Rated capacity	
Energy	7.92 Wh	2,200 mAh	
Specific energy	176 Wh/kg	Nominal voltage	
Volumetric density	463.25 Wh/L	3.6 V	
Capacity ranking	#170 of 279 18650s	Max charge voltage	
		4.2 V	
		Discharge cutoff	
		2.5 V	
		Energy	
		7.92 Wh	
		Standard charge current	
		1,100 mA	
		Typical charge time	
		2 h	
		Standard discharge	
		550mA	

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 · ≈0.63 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 8,800 mAh · 412 Wh · ≈2.34 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 8,800 mAh · 507 Wh · ≈2.88 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 13,200 mAh · 190 Wh · ≈1.08 kg cells
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SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Lei INR-18650-CE (this cell)	2,200	—	7.92	45 g	176
Panasonic NCR18650D	2,700	5.1 A	10	45.5 g	220
Sanyo UR18650ZT	2,650	5.3 A	9.8	46 g	213
LG LGDB118650	2,600	5.1 A	9.8	—	—
LG LGDBB11865	2,600	5.1 A	9.8	46.5 g	210
Murata VTC5D	2,700	35 A	9.7	46.7 g	208

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 Savors page	cellsaviors.com/cell-database/lei-inr-18650-ce
Full cell database	cellsaviors.com/cell-database