Illustrative render generated from published specifications

BAK 65E

BAK · released 2026

21700 · NMC

MOOCH-TESTED · 25 A

Live page & updates

6,500 mAh	25 A	3.6 V	23.4 Wh
CAPACITY	MOOCH CONTINUOUS	NOMINAL · 2.5 – 4.2 V	ENERGY

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 21700S — #1 of 72

Lowest in database — Highest

More capacity than 100% of 21700 cells in our database, but lower discharge than average.

VOLTAGE OPERATING WINDOW — 1.7 V usable

Cutoff 2.5 V — Nominal 3.6 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.

APPLICATION SUITABILITY

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

Powerwalls	High capacity means more stored energy per cell. Fewer cells needed for a given kWh target.
Ebike packs	Good balance of capacity for range and discharge for hills. Works well in most ebike packs.
Car audio	Enough discharge to handle amplifier bursts without voltage sag.
High-drain vaping	Above the 25A Mooch CDR threshold. Suitable for regulated and mechanical mods.
Flashlights	High capacity means long runtime. Great for everyday carry and extended use.
Power tools	Sufficient discharge and capacity for most power tool packs.

IDENTITY

Manufacturer	**BAK**
Model	**65E**
Format	**21700**
Chemistry	**NMC**
Year released	**2026**
Protection	**Unprotected**

OPERATING TEMPERATURE

Charging	**-30°C to 70°C**
Discharging	**-30°C to 60°C**

ENERGY & POWER DENSITY

Energy	**23.4 Wh**
Capacity ranking	**#1 of 72 21700s**

ELECTRICAL

Rated capacity	**6,500 mAh**
Nominal voltage	**3.6 V**
Max charge voltage	**4.2 V**
Discharge cutoff	**2.5 V**
Energy	**23.4 Wh**
Internal resistance	**8 mΩ**
Max continuous discharge	**25 A (mooch)**
Discharge C-rate	**3.8C**
Standard charge current	**3,175 mA**
Typical charge time	**2 h**
Standard discharge	**1270mA**
Cycle life	**500 cycles**

C-RATE CONVERSION · 6,500 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	1.3 A	5h 00m
0.5C	3.25 A	2h 00m
1C	6.5 A	1h 00m
2C	13 A	30m
3C	19.5 A	20m

Highlighted row is closest to the rated 25 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
Standard	3,175 mA	~2h 03m
0.5C	3,250 mA	~2h 00m
1C	6,500 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	19.5 Ah	211 Wh
7S	25.2 V	29.4 V	21	19.5 Ah	491 Wh
10S	36 V	42 V	30	19.5 Ah	702 Wh
13S	46.8 V	54.6 V	39	19.5 Ah	913 Wh
14S	50.4 V	58.8 V	42	19.5 Ah	983 Wh

EXAMPLE PACKS

7S2P
24V ebike / small pack

14 cells · 25.2 V

13,000 mAh · 328 Wh

50 A max

13S4P
48V ebike standard

52 cells · 46.8 V

26,000 mAh · 1,217 Wh

100 A max

16S4P
DIY powerwall

64 cells · 57.6 V

26,000 mAh · 1,498 Wh

100 A max

4S6P
Power tool replacement

24 cells · 14.4 V

39,000 mAh · 562 Wh

150 A max

SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
BAK 65E (this cell)	**6,500**	**25 A**	**23.4**	**—**	**—**
Amprius INR21700-65	6,500	13 A	23.4	74 g	316
Linkdata 65P	6,500	52 A	23.4	70.2 g	333
Vapcell F63	6,250	12 A	22.5	—	—
Linkdata 60P	6,000	60 A	21.6	68 g	318
Vapcell F60	6,000	12 A	21.6	74 g	292

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/bak-65e
Manufacturer datasheet	https://convoylight.com/uploads/72553/cart/resources/20250901/...
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/bench-test-results-b...
Full cell database	cellsaviors.com/cell-database