

Illustrative render generated from published specifications

14.3 × 49.4 mm
24 g

Vapcell H10

Vapcell · released 2020

14500 NMC

MOOCH-TESTED · 10 A

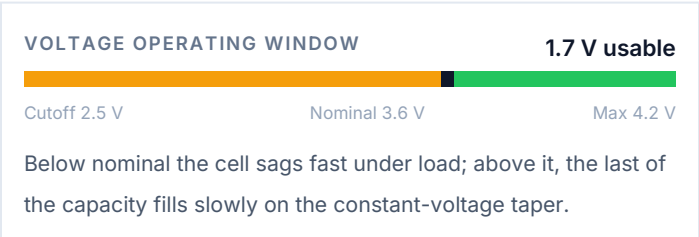


Live page & updates

1,000 mAh CAPACITY	10 A MOOCH CONTINUOUS	3.6 V NOMINAL · 2.5 – 4.2 V	3.6 Wh ENERGY · 150 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.



APPLICATION SUITABILITY

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

● Powerwalls	Too low capacity for practical powerwall use. You'd need too many cells.
● Ebike packs	Not enough discharge for ebike use. Voltage sag would be a problem under load.
● Car audio	Might work for smaller setups. Check your amp's peak current draw.
● 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	May work for lighter-duty tools. Check your tool's current requirements.

IDENTITY

Manufacturer	Vapcell
Model	H10
Format	14500
Chemistry	NMC
Year released	2020
Wrap colour	Purple
Insulator	White
Terminal	Flat top
Protection	Unprotected

OPERATING TEMPERATURE

Charging	0°C to 45°C
Discharging	-20°C to 75°C

ENERGY & POWER DENSITY

Energy	3.6 Wh
Specific energy	150 Wh/kg
Volumetric density	453.75 Wh/L
Power density (mass)	1,500 W/kg
Power density (volume)	4,537 W/L
Capacity ranking	#1 of 2 14500s

PHYSICAL

Diameter	14.3 mm
Length	49.4 mm
Weight	24 g

ELECTRICAL

Rated capacity	1,000 mAh
Nominal voltage	3.6 V
Max charge voltage	4.2 V
Discharge cutoff	2.5 V
Energy	3.6 Wh
Internal resistance	18 mΩ
Max continuous discharge	10 A (mooch)
Discharge C-rate	10C
Standard charge current	500 mA
Typical charge time	2 h

C-RATE CONVERSION · 1,000 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	0.2 A	5h 00m
0.5C	0.5 A	2h 00m
1C	1 A	1h 00m
2C	2 A	30m
3C	3 A	20m
5C	5 A	12m

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

Highlighted row is closest to the rated 10 A continuous discharge.

CHARGING

Rate	Current	Estimated Time to Full
0.5C	500 mA	~2h 00m
1C	1,000 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	3 Ah	32 Wh
7S	25.2 V	29.4 V	21	3 Ah	76 Wh
10S	36 V	42 V	30	3 Ah	108 Wh
13S	46.8 V	54.6 V	39	3 Ah	140 Wh
14S	50.4 V	58.8 V	42	3 Ah	151 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 2,000 mAh · 50 Wh 20 A max · ≈0.34 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 4,000 mAh · 187 Wh 40 A max · ≈1.25 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 4,000 mAh · 230 Wh 40 A max · ≈1.54 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 6,000 mAh · 86 Wh 60 A max · ≈0.58 kg cells
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SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

Cell	MAH	Continuous	WH	Weight	WH/KG
Vapcell H10 (this cell)	1,000	10 A	3.6	24 g	150
Vapcell K10	1,000	8 A	3.6	24 g	150

- 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.

Cell Savors page	cellsaviors.com/cell-database/vapcell-h10
Manufacturer datasheet	https://lygte-info.dk/review/batteries2012/Vapcell%20INR14500%...
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/bench-test-results-v...
Full cell database	cellsaviors.com/cell-database