

Illustrative render generated from published specifications

26.1 × 65.5 mm
95 g

Vapcell G53

Vapcell · released 2020

26650 NMC

MOOCH-TESTED · 20 A



Live page & updates

5,300 mAh CAPACITY	20 A MOOCH CONTINUOUS	3.6 V NOMINAL · 2.5 – 4.2 V	19.08 Wh ENERGY · 200.84 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 26650S #3 of 15 Lowest in databaseHighest More capacity than 87% of 26650 cells in our database, but lower discharge than average.	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.
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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	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	Usable in regulated mods at moderate wattage. Not recommended for 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		PHYSICAL	
Manufacturer	Vapcell	Diameter	26.1 mm
Model	G53	Length	65.5 mm
Format	26650	Weight	95 g
Chemistry	NMC	ELECTRICAL	
Year released	2020		
Wrap colour	 Gold		
Terminal	Flat top		
Protection	Unprotected		
ENERGY & POWER DENSITY		Rated capacity	5,300 mAh
Energy	19.08 Wh	Nominal voltage	3.6 V
Specific energy	200.84 Wh/kg	Max charge voltage	4.2 V
Volumetric density	544.46 Wh/L	Discharge cutoff	2.5 V
Power density (mass)	758 W/kg	Energy	19.08 Wh
Power density (volume)	2,055 W/L	Internal resistance	15 mΩ
Capacity ranking	#3 of 15 26650s	Max continuous discharge	20 A (mooch)
		Discharge C-rate	3.8C
		Standard charge current	2,000 mA
		Typical charge time	2.7 h
		Standard discharge	1060mA

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	1.06 A	5h 00m
0.5C	2.65 A	2h 00m
1C	5.3 A	1h 00m
2C	10.6 A	30m
3C	15.9 A	20m

Highlighted row is closest to the rated 20 A continuous discharge.

CHARGING		
RATE	CURRENT	ESTIMATED TIME TO FULL
Standard	2,000 mA	~2h 39m
0.5C	2,650 mA	~2h 00m

1C

5,300 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	15.9 Ah	172 Wh
7S	25.2 V	29.4 V	21	15.9 Ah	401 Wh
10S	36 V	42 V	30	15.9 Ah	572 Wh
13S	46.8 V	54.6 V	39	15.9 Ah	744 Wh
14S	50.4 V	58.8 V	42	15.9 Ah	801 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 10,600 mAh · 267 Wh 40 A max · ≈1.33 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 21,200 mAh · 992 Wh 80 A max · ≈4.94 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 21,200 mAh · 1,221 Wh 80 A max · ≈6.08 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 31,800 mAh · 458 Wh 120 A max · ≈2.28 kg cells
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SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Vapcell G53 (this cell)	5,300	20 A	19.08	95 g	201
Vapcell INR26650-5500	5,500	20 A	19.8	96 g	206
Vapcell INR26650-5000	5,000	20 A	18	95 g	189

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/vapcell-g53
Manufacturer datasheet	https://www.vapcelltech.com/h-pd-54.html
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/bench-test-results-v...
Full cell database	cellsaviors.com/cell-database