

Illustrative render generated from published specifications

26.08 × 67.17 mm
91.2 g

Imren PURPLE
22A 5500mAh



Live page & updates

Imren · released 2016

26650 LMO

MOOCH-TESTED · 22 A

5,500 mAh CAPACITY	22 A MOOCH CONTINUOUS	3.6 V NOMINAL · 2.5 – 4.2 V	19.8 Wh ENERGY · 217.11 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 #1 of 15 Lowest in databaseHighest More capacity than 100% 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	Imren	Diameter	26.08 mm
Model	PURPLE 22A 5500mAh	Length	67.17 mm
Format	26650	Weight	91.2 g
Chemistry	LMO	ELECTRICAL	
Year released	2016		
Wrap colour	Purple		
Terminal	Flat top		
Protection	Unprotected		
ENERGY & POWER DENSITY		Rated capacity	5,500 mAh
Energy	19.8 Wh	Nominal voltage	3.6 V
Specific energy	217.11 Wh/kg	Max charge voltage	4.2 V
Volumetric density	551.8 Wh/L	Discharge cutoff	2.5 V
Power density (mass)	868 W/kg	Energy	19.8 Wh
Power density (volume)	2,207 W/L	Max continuous discharge	22 A (mooch)
Capacity ranking	#1 of 15 26650s	Discharge C-rate	4C

C-RATE CONVERSION · 5,500 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	1.1 A	5h 00m
0.5C	2.75 A	2h 00m
1C	5.5 A	1h 00m
2C	11 A	30m
3C	16.5 A	20m

Highlighted row is closest to the rated 22 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	2,750 mA	~2h 00m
1C	5,500 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	16.5 Ah	178 Wh
7S	25.2 V	29.4 V	21	16.5 Ah	416 Wh
10S	36 V	42 V	30	16.5 Ah	594 Wh
13S	46.8 V	54.6 V	39	16.5 Ah	772 Wh
14S	50.4 V	58.8 V	42	16.5 Ah	832 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 11,000 mAh · 277 Wh 44 A max · ≈1.28 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 22,000 mAh · 1,030 Wh 88 A max · ≈4.74 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 22,000 mAh · 1,267 Wh 88 A max · ≈5.84 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 33,000 mAh · 475 Wh 132 A max · ≈2.19 kg cells
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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/imren-purple-22a-5500mah
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/imren-purple-22a-5500mah
Full cell database	cellsaviors.com/cell-database