

Illustrative render generated from published specifications

Energig EC-IFR20C



Live page & updates

Energig

26650

LFP

MOOCH-TESTED · 46 A

2,300 mAh CAPACITY	46 A MOOCH CONTINUOUS	3.2 V NOMINAL · 2.5 – 3.65 V	7.36 Wh ENERGY
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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

#15 of 15

Lowest in database

Highest

Higher discharge than 87% of 26650 cells in our database.

Great for high-drain builds.

VOLTAGE OPERATING WINDOW

1.15 V usable

Cutoff 2.5 V

Nominal 3.2 V

Max 3.65 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	Usable for powerwalls but lower capacity means you'll need more cells to hit your target kWh.
Ebike packs	Marginal. Check your motor's peak draw first. You might get voltage sag under load.
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	Lower capacity means shorter runtime. Better cells are available for flashlight use.
Power tools	Sufficient discharge and capacity for most power tool packs.

IDENTITY		ELECTRICAL	
Manufacturer	Energig	Rated capacity	2,300 mAh
Model	EC-IFR20C	Nominal voltage	3.2 V
Format	26650	Max charge voltage	3.65 V
Chemistry	LFP	Discharge cutoff	2.5 V
Terminal	Flat top	Energy	7.36 Wh
Protection	Unprotected	Internal resistance	13.2 mΩ
ENERGY & POWER DENSITY		Max continuous discharge	46 A (mooch)
Energy	7.36 Wh	Discharge C-rate	20C
Capacity ranking	#15 of 15 26650s	Standard charge current	2,000 mA
		Typical charge time	1.2 h

C-RATE CONVERSION · 2,300 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	0.46 A	5h 00m
0.5C	1.15 A	2h 00m
1C	2.3 A	1h 00m
2C	4.6 A	30m
3C	6.9 A	20m
5C	11.5 A	12m
8C	18.4 A	7m 30s
10C	23 A	6m
15C	34.5 A	4m
20C	46 A	3m

Highlighted row is closest to the rated 46 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,150 mA	~2h 00m
Standard	2,000 mA	~1h 09m

1C 2,300 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
4S	12.8 V	14.6 V	12	6.9 Ah	88 Wh
8S	25.6 V	29.2 V	24	6.9 Ah	177 Wh
16S	51.2 V	58.4 V	48	6.9 Ah	353 Wh

EXAMPLE PACKS

4S1P 12V system 4 cells · 12.8 V 2,300 mAh · 29 Wh 46 A max	4S2P 12V with more capacity 8 cells · 12.8 V 4,600 mAh · 59 Wh 92 A max	8S1P 24V system 8 cells · 25.6 V 2,300 mAh · 59 Wh 46 A max	16S1P Powerwall / 48V ebike 16 cells · 51.2 V 2,300 mAh · 118 Wh 46 A max
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SIMILAR CELLS

Same format and chemistry, within ± 500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Energig EC-IFR20C (this cell)	2,300	46 A	7.36	—	—
Vapcell LiFePO4	2,600	55 A	8.3	90 g	92

HANDLING & SAFETY

- Never charge above 3.65V 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/energig-ec-ifr20c

Independent test (Mooch)

<https://www.e-cigarette-forum.com/threads/bench-test-results-e...>

Full cell database

cellsaviors.com/cell-database