



Sinc

18650LCO

18 × 65 mm
44 g

Sinc CRN18650-2200MAH



Live page & updates

2,200mAh CAPACITY	2A RATED CONTINUOUS	3.6V NOMINAL · 2.75 – 4.2 V	7.92Wh ENERGY · 180 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.

CAPACITY AMONG 18650S

#170 of 279

Lowest in databaseHighest

A mid-range 18650 cell. Solid for builds that don't need extreme capacity or discharge.

VOLTAGE OPERATING WINDOW

1.45 V usable

Cutoff 2.75 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.

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	Not enough discharge for ebike use. Voltage sag would be a problem under load.
Car audio	Not enough discharge for car audio amplifiers. You need at least 15-20A continuous for most setups.
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	Not enough discharge or capacity for power tool use.

IDENTITY		PHYSICAL	
Manufacturer	Sinc	Diameter	18 mm
Model	CRN18650-2200MAH	Length	65 mm
Format	18650	Weight	44 g
Chemistry	LCO	ELECTRICAL	
Wrap colour	Green		
Insulator	Black		
Terminal	Flat top		
Protection	Unprotected		
OPERATING TEMPERATURE		Rated capacity	2,200 mAh
Charging	0°C to 55°C	Nominal voltage	3.6 V
Discharging	-20°C to 75°C	Max charge voltage	4.2 V
ENERGY & POWER DENSITY		Discharge cutoff	2.75 V
		Energy	7.92 Wh
		Max continuous discharge	2 A (datasheet)
		Discharge C-rate	0.9C
		Standard charge current	1,100 mA
Energy	7.92 Wh	Typical charge time	2 h
Specific energy	180 Wh/kg	Standard discharge	1100mA
Volumetric density	478.83 Wh/L	Cycle life	500 cycles
Power density (mass)	164 W/kg		
Power density (volume)	435 W/L		
Capacity ranking	#170 of 279 18650s		

Highlighted row is closest to the rated 2 A continuous discharge.

CHARGING		
RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,100 mA	~2h 00m

1C

2,200 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	6.6 Ah	71 Wh
7S	25.2 V	29.4 V	21	6.6 Ah	166 Wh
10S	36 V	42 V	30	6.6 Ah	238 Wh
13S	46.8 V	54.6 V	39	6.6 Ah	309 Wh
14S	50.4 V	58.8 V	42	6.6 Ah	333 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 4,400 mAh · 111 Wh 4 A max · ≈0.62 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 8,800 mAh · 412 Wh 8 A max · ≈2.29 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 8,800 mAh · 507 Wh 8 A max · ≈2.82 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 13,200 mAh · 190 Wh 12 A max · ≈1.06 kg cells
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SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Sinc CRN18650-2200MAH (this cell)	2,200	2 A	7.92	44 g	180
Xtar 18650 2600mAh 25A	2,600	25 A	9.4	47 g	199
EVE 20P	2,000	30 A	7.2	45 g	160
FP 18650-2000mAh	2,000	—	7.2	—	—

HANDLING & SAFETY

- Never charge above 4.2V or discharge below 2.75V.
- 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/sinc-crn18650-2200mah
Manufacturer datasheet	https://www.megacellmonitor.com/pdf/vendor_specs/SPEC_XINCHI_X...
Full cell database	cellsaviors.com/cell-database