

Illustrative render generated from published specifications

18.2 × 65 mm
46 g

Sanyo
UR18650ZT



Live page & updates

Sanyo

18650

NMC

2,650 mAh

CAPACITY

5.3 A

RATED CONTINUOUS

3.7 V

NOMINAL · 3 – 4.3 V

9.81 Wh

ENERGY · 213.26 WH/KG

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 18650S

#37 of 169



More capacity than 79% of 18650 cells in our database. One of the higher-capacity options.

VOLTAGE OPERATING WINDOW

1.3 V usable



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	High capacity means more stored energy per cell. Fewer cells needed for a given kWh target.
Ebike packs	Marginal. Check your motor's peak draw first. You might get voltage sag 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	Decent runtime. Works well for most flashlights.
Power tools	Not enough discharge or capacity for power tool use.

IDENTITY		PHYSICAL	
Manufacturer	Sanyo	Diameter	18.2 mm
Model	UR18650ZT	Length	65 mm
Format	18650	Weight	46 g
Chemistry	NMC	ELECTRICAL	
Wrap colour	Orange	Rated capacity	2,650 mAh
Insulator	Purple	Nominal voltage	3.7 V
Terminal	Flat top	Max charge voltage	4.3 V
Protection	Unprotected	Discharge cutoff	3 V
OPERATING TEMPERATURE		Energy	9.81 Wh
Charging	0°C to 45°C	Max continuous discharge	5.3 A (datasheet)
Discharging	-20°C to 60°C	Discharge C-rate	2C
ENERGY & POWER DENSITY		Standard charge current	1,890 mA
Energy	9.81 Wh	Typical charge time	1.4 h
Specific energy	213.26 Wh/kg	Standard discharge	530mA
Volumetric density	580.13 Wh/L		
Power density (mass)	426 W/kg		
Power density (volume)	1,160 W/L		
Capacity ranking	#37 of 169 18650s		
C-RATE CONVERSION · 2,650 MAH			
C-RATE	CURRENT	THEORETICAL RUNTIME	
0.2C	0.53 A	5h 00m	
0.5C	1.33 A	2h 00m	
1C	2.65 A	1h 00m	
2C	5.3 A	30m	

Highlighted row is closest to the rated 5.3 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,325 mA	~2h 00m
Standard	1,890 mA	~1h 24m
1C	2,650 mA	~1h 00m

Constant-current phase only. Real charge time runs longer because of the constant-voltage taper at the end.

SERIES PACK CONFIGURATIONS

Voltagess 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	11.1 V	12.9 V	9	7.9 Ah	88 Wh
7S	25.9 V	30.1 V	21	7.9 Ah	206 Wh
10S	37 V	43 V	30	7.9 Ah	294 Wh
13S	48.1 V	55.9 V	39	7.9 Ah	382 Wh
14S	51.8 V	60.2 V	42	7.9 Ah	412 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.9 V 5,300 mAh · 137 Wh 11 A max · ≈0.64 kg cells	13S4P 48V ebike standard 52 cells · 48.1 V 10,600 mAh · 510 Wh 21 A max · ≈2.39 kg cells	16S4P DIY powerwall 64 cells · 59.2 V 10,600 mAh · 628 Wh 21 A max · ≈2.94 kg cells	4S6P Power tool replacement 24 cells · 14.8 V 15,900 mAh · 235 Wh 32 A max · ≈1.1 kg cells
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SIMILAR CELLS

Same format and chemistry, within ± 500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Sanyo UR18650ZT (this cell)	2,650	5.3 A	9.81	46 g	213
LG LGABD11865	3,000	—	11.3	—	—
LG LGDBD11865	3,000	5.8 A	11.3	48.5 g	232
Panasonic NCR18650BD	3,100	10 A	11.2	49.5 g	225
Samsung ICR18650-30B	2,950	5.9 A	11.2	48 g	232
Samsung ICR18650-30A	3,000	6 A	11.1	48 g	231

HANDLING & SAFETY

- Never charge above 4.3V or discharge below 3V.
- 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/sanyo-ur18650zt
Manufacturer datasheet	https://na.industrial.panasonic.com/sites/default/pidsa/files/...
Full cell database	cellsaviors.com/cell-database