

Illustrative render generated from published specifications

Sony

US18650VTC6



Live page & updates

Sony

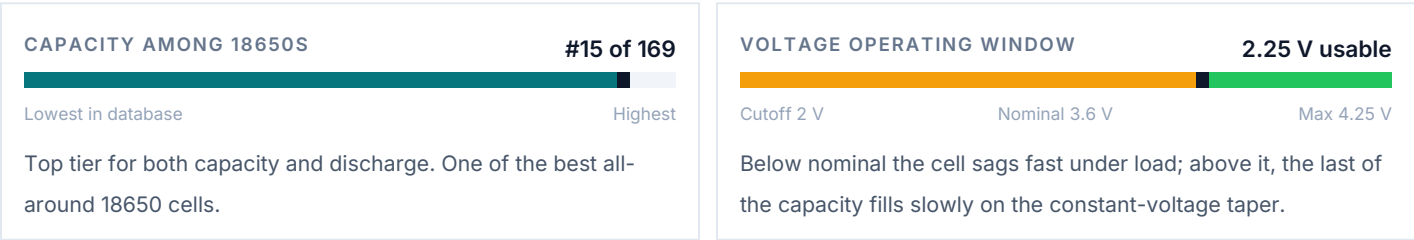
18650NMC

MOOCH-TESTED · 15 A

3,000 mAh CAPACITY	15 A MOOCH CONTINUOUS	3.6 V NOMINAL · 2 – 4.25 V	10.8 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.



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	Might work for smaller setups. Check your amp's peak current draw.
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		ELECTRICAL	
Manufacturer	Sony	Rated capacity	3,000 mAh
Model	US18650VTC6	Nominal voltage	3.6 V
Format	18650	Max charge voltage	4.25 V
Chemistry	NMC	Discharge cutoff	2 V
Wrap colour	Green	Energy	10.8 Wh
Insulator	Black	Internal resistance	18 mΩ
ENERGY & POWER DENSITY		Max continuous discharge	15 A (mooch)
		Discharge C-rate	5C
		Standard charge current	5,000 mA
		Typical charge time	0.6 h
		Standard discharge	15A
Energy	10.8 Wh		
Capacity ranking	#15 of 169 18650s		

C-RATE CONVERSION · 3,000 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	0.6 A	5h 00m
0.5C	1.5 A	2h 00m
1C	3 A	1h 00m
2C	6 A	30m
3C	9 A	20m
5C	15 A	12m

Highlighted row is closest to the rated 15 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	1,500 mA	~2h 00m
1C	3,000 mA	~1h 00m
Standard	5,000 mA	~0h 36m

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	12.8 V	9	9 Ah	97 Wh
7S	25.2 V	29.8 V	21	9 Ah	227 Wh
10S	36 V	42.5 V	30	9 Ah	324 Wh
13S	46.8 V	55.3 V	39	9 Ah	421 Wh
14S	50.4 V	59.5 V	42	9 Ah	454 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 6,000 mAh · 151 Wh 30 A max	13S4P 48V ebike standard 52 cells · 46.8 V 12,000 mAh · 562 Wh 60 A max	16S4P DIY powerwall 64 cells · 57.6 V 12,000 mAh · 691 Wh 60 A max	4S6P Power tool replacement 24 cells · 14.4 V 18,000 mAh · 259 Wh 90 A max
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SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Sony US18650VTC6 (this cell)	3,000	15 A	10.8	—	—
LG LGEBMJ11865	3,500	10 A	12.7	—	—
LG LGDBMJ11865	3,500	10 A	12.7	49 g	259
LG LGABF1L1865	3,350	4.9 A	12.2	49 g	248
LG LGGBF1L1865	3,350	4.9 A	12.2	—	—
Panasonic NCR18650B	3,350	4 A	12.1	47.5 g	254

HANDLING & SAFETY

- Never charge above 4.25V or discharge below 2V.
- 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/sony-us18650vtc6
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/sony-vtc6-15a-3000ma...
Full cell database	cellsaviors.com/cell-database