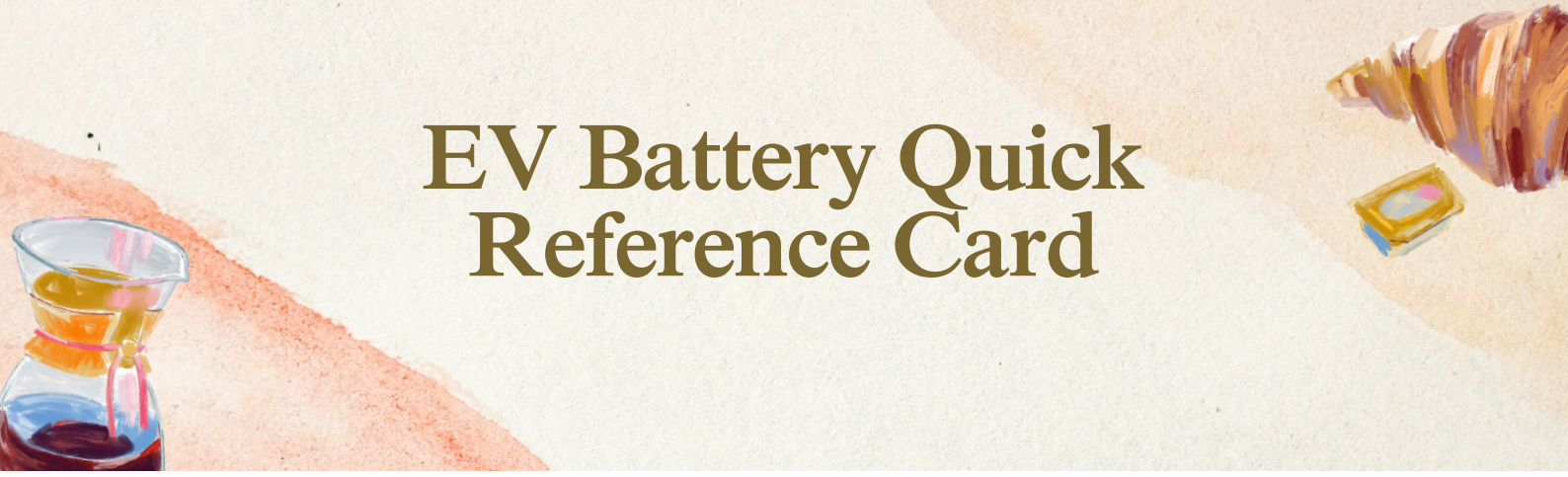




EV Battery Quick Reference Card

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10 Essential Battery Terms

SoH (State of Health): Percentage of original capacity remaining. 90% SoH means 90% of original range available.

SoC (State of Charge): Current charge level, like a fuel gauge. Not a health indicator.

DoD (Depth of Discharge): How deeply the battery is drained before recharging. Lower DoD means less stress.

Cycle Count: Total full charge/discharge cycles completed. Higher count means more wear.

C Rate: Charging speed relative to capacity. 1C fills the battery in 1 hour. Higher C rate means more heat.

Fast Charge Ratio: Percentage of charges done via DC fast charging vs slow AC. Higher ratio means more thermal stress.

Cell Voltage Variance: Difference between individual cell voltages. High variance means uneven aging inside the pack.

Capacity Fade: Total energy storage lost over time. Directly reduces range.

Internal Resistance: Opposition to current flow. Increases with age, reduces performance and range.

Thermal Runaway: Uncontrolled overheating of a cell. Prevented by BMS thermal management.

Used EV Battery Assessment Thresholds

State of Health (SoH)

- **GOOD:** Above 85%. Healthy, list with confidence.
- **MODERATE:** 70% to 85%. Price accordingly, disclose to buyer.

- CONCERN: Below 70%. May need pack replacement. Check warranty.

Fast Charge Ratio

- GOOD: Below 30%. Primarily slow charged.
- MODERATE: 30% to 60%. Mixed usage, acceptable if SoH is healthy.
- CONCERN: Above 60%. Heavy fast charging history. Price accordingly.

Cell Voltage Variance

- GOOD: All cells within 20mV of each other.
- MODERATE: Variance of 20mV to 40mV. Monitor closely.
- CONCERN: Any cell 50mV+ from pack average. Accelerated degradation likely.

Cycle Count (relative to age)

- GOOD: Under 300 cycles per year of ownership.
- MODERATE: 300 to 500 cycles per year.
- CONCERN: Over 500 cycles per year. Heavy usage, cross reference with SoH.

Warranty Status

- GOOD: 4+ years remaining, transferable.
- MODERATE: 1 to 3 years remaining.
- CONCERN: Expired or non transferable.

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Download the full 30+ term glossary at navionyx.com/resources

See a sample EV Certificate at navionyx.com/resources/ev-battery-health-report-sample