

Powertrain Analysis Report

Your Name

August 20, 2023

1 Inputs

Battery Mass	10 kg
Specific Energy	200 Wh/kg
Motor Power	20000 W
Propeller Diameter	0.4 m
Hub Diameter	0.1 m
Diffuser Expansion Ratio	0.9

2 Outputs

Total Runtime	0.1 hours
Static Thrust	38.76437934712279 kgf
Net Thrust	28.76437934712279 kgf

3 Plots

3.1 Battery Capacity vs Time

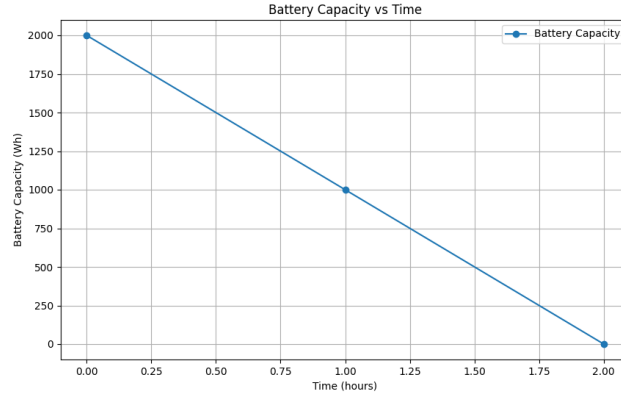


Figure 1: Battery capacity over time.

Appendix: Class Structure

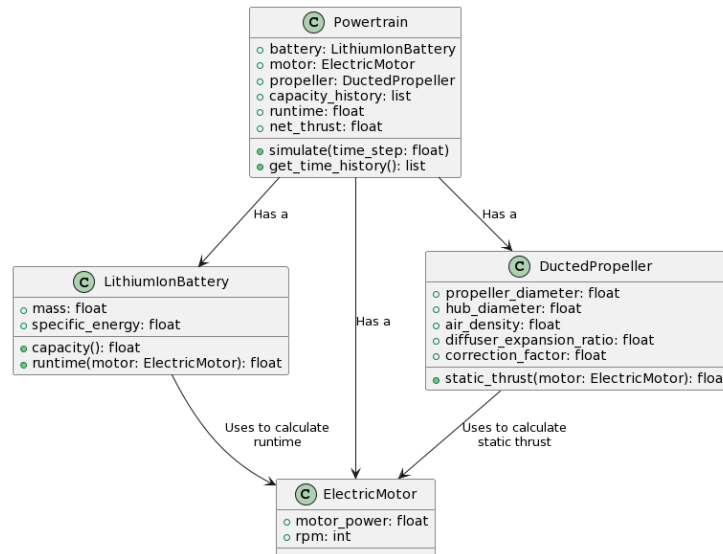


Figure 2: Class structure and relationships.