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pfzhpssddn Carbon Footprint Dashboard
Summary for 1.0 unit, System Boundary: Cradle-to-Grave, Standard: GHG Protocol. Production in China.

Total Carbon Footprint: 16.225 kg CO2e

TOTAL FOOTPRINT

16.225 kg CO2e

CARBON INTENSITY

16.225 kg CO2e / unit

TOP MATERIAL HOTSPOT

Aluminum Housing 3.35 kgCO2e

PRIMARY EMISSION SCOPE

Scope 3 13.225 kgCO2e

Lifecycle Stage Breakdown

Materials (33.84%) Manufacturing (18.49%) Transport (0.83%) Use Phase (46.23%) End-of-Life (0.62%)

33.8% 18.5% 46.2%

Material Carbon Impact

Aluminum Housing 3.35 kgCO2e (61.0%)

Electronic Circuit Board 1.50 kgCO2e (27.3%)

ABS Plastic Enclosure 0.64 kgCO2e (11.7%)

Key Insights (Hotspots)

Use Phase Energy Consumption (46.2%): This is the single largest contributor, driven by product energy use over
its lifespan.

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Material Acquisition (33.8%): Production of raw materials, especially aluminum and electronics, significantly
impacts the footprint.

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Manufacturing Energy (18.5%): Purchased electricity for manufacturing, even with 50% renewable usage, remains a substantial hotspot.

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Action Plan: How to Reduce

→ Reduce material intensity by designing for dematerialization and utilizing lightweight, recycled content.
→ Increase product energy efficiency during the use phase and promote renewable energy sourcing for end-users.
→ Enhance renewable energy procurement or implement on-site generation at manufacturing facilities.
→ Explore sourcing lower-carbon alternative materials and components through supply chain engagement.
→ Improve end-of-life strategies, including higher recyclability rates and closed-loop systems.