

html

# Product Carbon Footprint for jlkddrwkuo

Total PCF: 37.77 kg CO2e

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Total Product Footprint

**37.77 kg CO2e**

Per 1.0 unit

Carbon Intensity

**37.77 kg CO2e/unit**

Functional Unit: 1.0 unit

Top Material Hotspot

**Aluminum Casing (80%)**

6.0 kg CO2e from materials

Primary Emission Scope

**Scope 3 (89.8%)**

Downstream Use & Upstream Materials

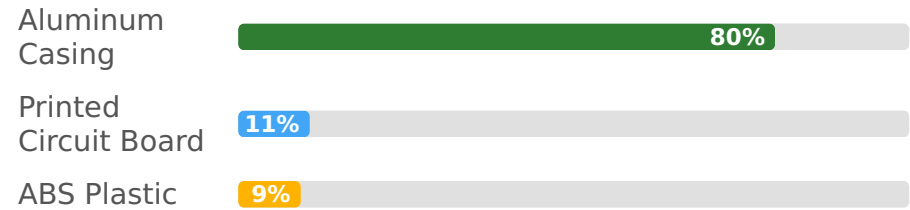
## Emission Breakdown

## Lifecycle Stage Carbon Contribution



- Materials (19.37%)
- Production (7.74%)
- Transport (0.59%)
- Use Phase (72.30%)
- EoL Credit (-0.96 kg CO<sub>2</sub>e)

## Material Composition vs Carbon Impact



Total carbon from materials: 7.5 kg CO<sub>2</sub>e

## Key Highlights & Insights

- Use Phase Dominance:** The product's operational use phase accounts for approximately 74% of the total carbon footprint, making it the most significant emission hotspot.
- Material Impact:** Raw material acquisition, specifically the Aluminum Casing, contributes about 20% of emissions, highlighting the need for sustainable material choices.
- Circular Economy Potential:** With 80% recyclability and an implemented product take-back scheme, there's significant potential to reduce the net footprint through effective end-of-life management.

## Recommendations for Emission Reduction

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- **Optimize Use Phase Efficiency:** Focus on designing jlkddrwkuo for maximum energy efficiency during its operational life and educate end-users on optimal usage.
- **Material Decarbonization:** Explore substituting high-impact materials with lower-carbon alternatives or those with higher recycled content.
- **Renewable Energy Procurement:** Continuously increase the percentage of renewable energy used in manufacturing facilities and encourage suppliers to adopt similar practices.
- **Strengthen Circularity:** Actively promote and facilitate the return and recycling of products at their end-of-life to maximize material recovery and minimize waste.