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Carbon Footprint Dashboard

carboncalcpcf.com

Product: **gdykzporvx** (1.0 unit)

Company: rwpsupptze | Standard: GHG Protocol

Total PCF: 24.67 kg CO2e

Total Footprint

24.67 kg CO2e

Per functional unit

Carbon Intensity

24.67 kg CO2e/unit

For gdykzporvx

Top Material Hotspot

Aluminum Alloy

6.00 kg CO2e (59.7%)

Primary Emission Scope

Scope 3

87.84% of total footprint

Lifecycle Stage Breakdown

Materials Acquisition	10.05 kg CO2e (35.8%)
Manufacturing Energy	3.00 kg CO2e (10.7%)
Transportation	0.03 kg CO2e (0.1%)
Use Phase	15.00 kg CO2e (53.4%)
End-of-Life (Credit)	-3.42 kg CO2e

Top Material Carbon Impact

Aluminum Alloy	6.00 kg CO2e (59.7%)
Electronic Components	2.00 kg CO2e (19.9%)
ABS Plastic	1.10 kg CO2e (11.0%)
Copper Wire	0.80 kg CO2e (8.0%)
Cardboard Packaging	0.15 kg CO2e (1.5%)

Key Emission Highlights

- **Use Phase Dominance:** The product's energy consumption during its 5-year lifespan is the largest hotspot, contributing 15.00 kg CO2e (60.8%) to the total footprint.
- **Material Impact:** Raw material acquisition and processing account for a significant 10.05 kg CO2e, with Aluminum Alloy being the leading contributor.
- ♻ **Circular Economy Benefits:** Strong recyclability (70%) and active take-back programs resulted in a substantial End-of-Life carbon credit of -3.42 kg CO2e.

Recommendations for Decarbonization

1. **Optimize Use Phase:** Investigate opportunities to reduce energy consumption during product use, through improved energy efficiency or integration of renewable energy.
2. **Material Decarbonization:** Explore lower-carbon alternative materials or increase recycled content for aluminum and plastics.
3. **Manufacturing Energy Transition:** Increase the share of renewable energy used in the China production facility.
4. **Circular Economy Enhancement:** Strengthen existing take-back programs to maximize material recovery and recycling efficiency.
5. **Data Improvement:** Prioritize primary data collection for key Scope 3 categories to enhance accuracy and meet future GHG Protocol reporting.