

upxqezegue Carbon Footprint

carboncalcpcf.com

Product: 1.0 unit | Production Country: China | Standard: GHG Protocol

Total PCF

63.80 kg CO₂e

Total Product Footprint

63.80 kg CO2e

Per 1.0 unit of upxqezegue

Carbon Intensity

63.80 kg CO2e/unit

Standardized per functional unit

Top Material Hotspot

Aluminum Casing

3.5 kg CO2e

Primary Emission Scope

Scope 2

32.03 kg CO₂e (Production)

Lifecycle Stage Breakdown

Production Phase	32.03 kg CO2e (50.20%)
Use Phase	25.00 kg CO2e (39.18%)
Materials Acquisition	6.00 kg CO2e (9.40%)
End-of-Life Treatment	0.45 kg CO2e (0.70%)
Transport	0.33 kg CO2e (0.52%)

Material Carbon Impact

Aluminum Casing	3.5 kg CO2e
Circuit Board	1.0 kg CO2e
Plastic Enclosure	0.75 kg CO2e
Copper Wire	0.6 kg CO2e
Packaging (Cardboard)	0.15 kg CO2e

Highlights & Key Hotspots

- **Production Phase Dominance:** The manufacturing process accounts for over half (50.20%) of the total carbon footprint, making it the single largest contributor.
- **Significant Use Phase Impact:** The product's energy consumption during its 5-year lifespan is a major hotspot, contributing 39.18% to the overall PCF.
- **Material Acquisition:** Raw material extraction and processing represent a notable 9.40% of emissions, with Aluminum Casing being the most impactful material.

Recommendations for Reduction

- ✓ **Optimize Production Energy:** Focus on increasing renewable energy sourcing at manufacturing facilities and improving energy efficiency in production processes.
- ✓ **Enhance Use Phase Efficiency:** Redesign the product for lower energy consumption during operation and educate users on energy-efficient usage patterns.
- ✓ **Source Sustainable Materials:** Explore and implement lower-carbon alternative materials and collaborate with suppliers for their decarbonization efforts.
- ✓ **Strengthen Circularity:** Maximize material recovery through the existing take-back scheme and design for easier disassembly and high-quality recycling.