

Product Carbon Footprint for iyynkgsvhv

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21.94 kg CO₂e
Total Product Footprint

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21.94 kg CO₂e

Carbon Intensity (per unit)

21.94 kg CO₂e/unit

Top Material Hotspot

Circuit Board (1.50 kg CO₂e)

Primary Emission Scope

Scope 3 (Use Phase, 68.37%)

Lifecycle Stage Breakdown

Upstream Materials	18.46%
Production (Scope 2)	18.50%
Transport & Distribution	1.09%
Use Phase	68.37%
End-of-Life (Credit)	-5.01%

Highlights: Critical Impacts

- **Use Phase Dominance:** The product's energy consumption over its 5-year lifespan accounts for 68.37% of the total footprint.
- **Significant Production Emissions:** Purchased electricity for manufacturing in China contributes 18.50% to the overall impact, despite 75% renewable energy use.
- **Upstream Material Footprint:** Material acquisition and pre-processing, particularly for the Circuit Board and Steel Frame, make up 18.46% of emissions.

Material Composition Carbon Impact (Upstream Scope 3)

Circuit Board	37.04% (1.50 kg CO2e)
Steel Frame	30.86% (1.25 kg CO2e)
Plastic Casing	22.22% (0.90 kg CO2e)
Copper Wire	4.94% (0.20 kg CO2e)
Packaging Cardboard	4.94% (0.20 kg CO2e)

Action Plan: How to Reduce

- Use Phase Optimization:** Reduce product energy consumption, extend lifespan, and promote renewable energy use by end-users.
- Sustainable Material Sourcing:** Explore lower-carbon alternatives for components like the Steel Frame and Circuit Board, engaging suppliers in decarbonization.
- Enhancing Circularity:** Increase recycling rates beyond 80% through improved take-back programs and designing for disassembly and repair.