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poevixzilv Carbon Footprint Overview

Detailed PCF analysis for 1.0 unit by gmvyttrntz

41.79 kg CO2e

Total Product Footprint

41.79 kg CO2e

Per 1.0 unit of poevixzilv

Carbon Intensity

41.79 kg CO2e/kg

Based on 1.0 kg estimated product weight

Top Material Hotspot

Circuit Board

1.50 kg CO2e from materials

Primary Emission Stage

Use Phase

18.10 kg CO2e (43.31% of total)

Lifecycle Stage Breakdown

Materials & Manufacturing	3.55 kg CO2e (8.49%)
Production Energy (Scope 2)	8.69 kg CO2e (20.79%)
Logistics & Distribution (Scope 3)	12.68 kg CO2e (30.34%)
Use Phase (Scope 3)	18.10 kg CO2e (43.31%)
End-of-Life (Scope 3)	-1.21 kg CO2e (-2.90%)

Material Composition vs Carbon Impact

Steel Casing	**1.25 kg CO2e**
Plastic Enclosure	**0.60 kg CO2e**
Circuit Board	**1.50 kg CO2e**
Wiring	**0.20 kg CO2e**

Total Material-Related Carbon: 3.55 kg CO2e

Key Highlights & Insights

- The **Use Phase** is the dominant carbon hotspot, accounting for 43.31% of the total footprint, driven by energy consumption over the product's lifespan.
- **Logistics & Distribution** contribute significantly (30.34%), emphasizing the impact of transport distances and modes for both upstream and downstream activities.
- The **Circuit Board** is the highest emitting component in the Bill of Materials, indicating a critical area for material and design optimization.

Recommended Decarbonization Actions

- **Enhance Energy Efficiency:** Focus on product design to drastically reduce energy consumption during the 5-year use phase.
- **Optimize Logistics:** Explore shorter supply chains, consolidate shipments, and shift to lower-carbon transport options (e.g., rail, sea freight) for main transport routes.
- **Sustainable Material Sourcing:** Prioritize sourcing lower-carbon or recycled content for components like the Circuit Board and other high-impact materials.
- **Boost Circularity:** Further develop and promote the existing "Yes, Advanced Recycling Program" to exceed 70% recyclability.