

carboncalcpcf.com

Product Carbon Footprint

25.08 kg CO₂e

Product: spwehzw hwh

Total Product Footprint

Standard: GHG Protocol | **Boundary:** Factory Gate (Cradle-to-Grave)

TOTAL FOOTPRINT

25.08 kg CO2e

CARBON INTENSITY

25.08 kg CO2e / unit

TOP MATERIAL HOTSPOT

Circuit Board (5.00 kg CO2e)

Key Insights & Hotspots

- The **Use Phase** dominates the product's carbon footprint, accounting for approximately 72% of gross emissions, highlighting energy consumption during product lifespan as the biggest impact area.
- **Raw Materials** represent the second-largest hotspot (~24% of gross emissions), with the Circuit Board (PCB) being the most carbon-intensive component.
- The **End-of-Life** phase provides a significant carbon credit (-2.67 kg CO₂e), demonstrating the positive impact of high recyclability (80%) and take-back programs.

Recommendations for Reduction

- **Optimize Use Phase Energy Efficiency:** Focus on reducing the product's energy consumption during its lifespan and encourage users to utilize renewable energy sources.
- **Source Low-Carbon Materials:** Engage with suppliers to identify and integrate lower-carbon alternatives for high-impact components, particularly for the circuit board.
- **Enhance Data Accuracy:** Prioritize gathering specific, verifiable data for all parameters (e.g., actual energy consumption, precise regional electricity grid factors) to refine future PCF calculations.
- **Strengthen Circularity:** Continue developing and meticulously tracking the effectiveness of circular economy initiatives and take-back programs to maximize avoided emissions at End-of-Life.