

Product Carbon Footprint Dashboard

For Product: **yfwimmruyn** by pdhvfxyhpn

CARBONCALPCF.COM

Total Cradle-to-Grave PCF

Lifecycle Stage Breakdown
16.51 kg CO₂e / unit

Use Phase of product

✓ Use Phase dominates the carbon footprint, accounting for **75.7% (12.50 kg CO₂e)** of total emissions, emphasizing product energy efficiency.

Carbon Intensity

✓ Materials Acquisition is the second largest contributor at **21.7% (3.59 kg CO₂e)**, with the Electronic Board being the primary hotspot due to its high embodied carbon.

Production

✓ The product benefits from a high recyclability percentage (80%) and circular programs, significantly minimizing

GHG Protocol Standard

End-of-Life impacts to only 0.4% of total PCF.

Top Material Hotspot

Electronic Board

Action Plan: Reducing Footprint

1. **Optimize Use Phase Energy Efficiency:** Prioritize design for maximum energy efficiency, leveraging lower-power components and optimizing software to reduce consumption during product usage.
2. **Sustainable Material Sourcing and Design:** Investigate and integrate alternative materials with lower embodied carbon, especially for the Electronic Board and Plastic Housing, and increase recycled content.
3. **Supply Chain Optimization:** Evaluate and optimize transport modes and routes to reduce distances and shift towards lower-emission freight options where feasible.
4. **Enhance Circularity:** Further invest in and promote circular/take-back programs, aiming to increase the recyclability percentage beyond 80% to achieve even greater end-of-life benefits.
5. **Renewable Energy Integration:** Increase the percentage of renewable energy used in the production facility to further reduce Scope 2 emissions, contributing to a greener manufacturing process.