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Product Carbon Footprint for dejjqrifzs

Report by mfvvkvuy • Generated May 18, 2026

12.217 kgCO₂e/unit
carboncalcpcf.com

Total Footprint

12.217 kgCO₂e/unit

Carbon Intensity

12.217 kgCO₂e/unit

Top Material Hotspot

PCB Assembly

0.750 kgCO₂e (40.02% of materials)

Primary Emission Scope

Scope 3 (Upstream & Downstream)

Key Insights & Hotspots

- The **Use Phase** dominates the product's carbon footprint, accounting for over 70% of total emissions due to energy consumption over its 5-year lifespan.
- **Raw Material Acquisition** is the second largest contributor, with complex electronics like PCB Assemblies being significant hotspots within material embodied emissions.
- While 60% renewable energy is used, the **Manufacturing/Production** emissions still contribute substantially due to the remaining reliance on China's grid electricity.

Action Plan for Reduction

- **Use Phase Decarbonization:** Implement design changes and software optimizations to significantly improve energy efficiency during product use.
- **Material Optimization:** Prioritize sourcing of lower-carbon materials, including those with higher recycled content, especially for PCB components and casing.
- **Renewable Energy Sourcing:** Actively increase the percentage of renewable energy utilized in manufacturing facilities, exploring both on-site generation and renewable energy certificates.
- **Enhance Circularity:** Strengthen the existing product take-back program to maximize actual recycling rates and ensure advanced end-of-life processing.