

hfqqsvovez Product Carbon Footprint

Report by carboncalcpf.com

Total PCF: **24.42 kg CO2e**

Key Sustainability Metrics

Material Carbon Impact (from BOM)



■ Aluminium Casing ■ Circuit Board (PCB) ■ ABS Plastic Housing ■ Copper Wiring ■ Cardboard Packaging

Highlights & Hotspots

- The **Use Phase** is the most significant contributor to the carbon footprint at 15.00 kg CO₂e (61.42%).
- **Material Acquisition** accounts for 8.87 kg CO₂e (36.32%), with Aluminium Casing being a major hotspot.
- **Scope 3 emissions** are dominant, making up approximately 93.85% of the total product footprint.

Action Plan for Reduction

- **Optimize Use Phase Efficiency:** Invest in R&D to significantly reduce product energy consumption during its 5-year lifespan.
- **Sustainable Material Sourcing:** Explore lower-carbon alternatives or higher recycled content for high-impact materials like Aluminium and ABS plastic.
- **Strengthen Circularity:** Leverage the existing take-back scheme and partnerships to maximize material recovery and extend product life.