

Product Carbon Footprint: qyfipdxpd

Total Product Carbon Footprint
98.87 kgCO₂e

Total Footprint

98.87

kg CO₂e for 1.0 unit

Carbon Intensity

98.87

kg CO₂e / unit

Top Material Hotspot

Aluminum

Casing (30.0 kg CO₂e)

Primary Emission Scope

Use Phase

Scope 3 Downstream (59.50 kg CO₂e)

Lifecycle Emissions Breakdown

Materials & Processing	51.50 kgCO2e
Manufacturing (Energy)	1.80 kgCO2e
Transport (Upstream)	0.57 kgCO2e
Use Phase	59.50 kgCO2e
End-of-Life (Avoided)	-14.50 kgCO2e

Material Carbon Impact

Aluminum Casing	30.0 kgCO2e
Circuit Board	15.0 kgCO2e
Plastic Housing	6.0 kgCO2e
Packaging Cardboard	0.5 kgCO2e

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Highlights

- The **Use Phase** is the largest emission hotspot, contributing 59.50 kg CO2e (approx. 60%) to the product's footprint.
- **Material Acquisition** is a significant contributor, with Aluminum Casing and Circuit Board being key hotspots.

How to Reduce Your Footprint

- **End-of-Life recycling** successfully avoids 14.50 kg CO2e, highlighting the positive impact of circularity.
- **Optimize Use Phase Efficiency:** Design for lower energy consumption during product lifespan.
- **Source Low-Carbon Materials:** Prioritize materials with lower embodied carbon and higher recycled content.
- **Enhance Circularity:** Strengthen take-back and recycling programs; improve design for disassembly.
- **Supply Chain Engagement:** Work with transport providers