

html

carboncalcpcf.com

Product Carbon Footprint Dashboard

Product Name

qkmsuyvtns

Total PCF

44.19 kg CO₂e

Standard

GHG Protocol

Total Footprint (Net)

44.19

kg CO₂e

Carbon Intensity

12.27

kg CO₂e / kg Product

Top Material Hotspot

Steel Casing

(5.0 kg CO₂e)

Primary Emission Scope

Use Phase

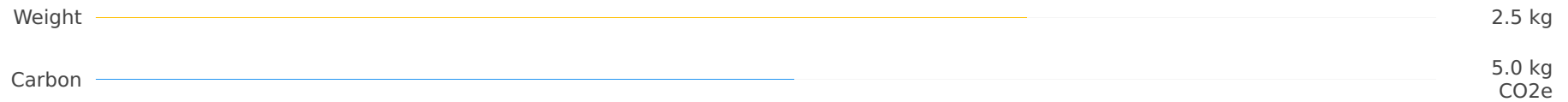
(37.5 kg CO₂e)

Lifecycle Stage Breakdown (Gross Emissions)

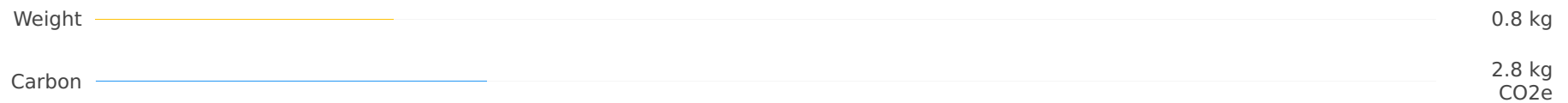
Raw Material Acquisition	9.6 kg CO2e
Manufacturing (S1 & S2)	3.6 kg CO2e
Transportation	0.61 kg CO2e
Use Phase	37.5 kg CO2e
End-of-Life (Credit)	-7.13 kg CO2e

Material Carbon Impact vs. Weight

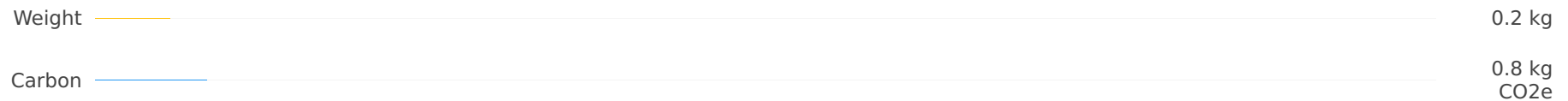
Steel Casing



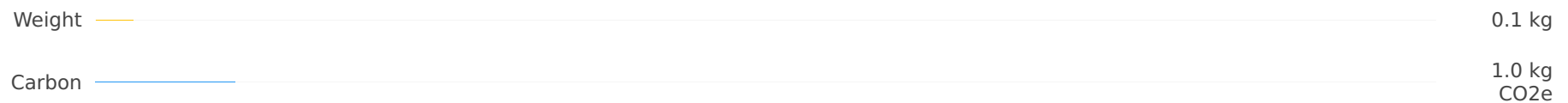
ABS Plastic Enclosure



Copper Wiring



PCB with Components



*Percentages for Weight are relative to Total Product Weight (3.6kg). Percentages for Carbon are relative to Total Raw Material Carbon (9.6kg CO₂e).

Key Highlights

- **Dominant Use Phase Impact:** The product's Use Phase is the most significant contributor to the carbon footprint (37.5 kg CO₂e), highlighting energy consumption during its 3-year lifespan.

Action Plan: How to Reduce Emissions

- **Optimize Use Phase Efficiency:** Prioritize design for energy efficiency and encourage renewable energy adoption among end-users to reduce the largest hotspot.
- **Innovate Sustainable Sourcing:** Investigate and integrate lower-carbon raw materials or increase recycled content beyond current EoL efforts.
- **Enhance Green Manufacturing:** Further increase renewable energy procurement at the manufacturing facility in China and continuously improve energy efficiency in production processes.