

html

iqwqnhzksq - Carbon Footprint Dashboard

Product Carbon Footprint Analysis by carboncalcpcf.com

40.93 kg
CO2e

Total Product Footprint

40.93 kg CO2e

Carbon Intensity

40.93 kg CO2e/unit

Top Material Hotspot

Aluminum Enclosure

Primary Emission Scope

Scope 3 (46.6% Materials, 42.8% Use)

Lifecycle Stage Breakdown (Net)

Materials (Scope 3, Cat. 1)	19.06 kg CO2e (46.6%)
Use Phase (Scope 3, Cat. 11)	17.50 kg CO2e (42.8%)
Manufacturing (Scope 2)	7.50 kg CO2e (18.3%)
Transportation (Scope 3, Cat. 4 & 9)	0.64 kg CO2e (1.6%)
End-of-Life Credit (Scope 3, Cat. 12)	-3.77 kg CO2e (-9.2%)

Material Composition vs Carbon Impact

Aluminum Enclosure	12.0 kg CO2e (63.0%)
Electronic Board	4.0 kg CO2e (21.0%)
Plastic Shell	2.0 kg CO2e (10.5%)
Copper Wire	0.7 kg CO2e (3.7%)
Packaging Cardboard	0.36 kg CO2e (1.9%)

Key Carbon Hotspots

Recommendations for Reduction

📦 **Materials (46.6%):** Extraction and processing of raw materials, particularly aluminum.

📦 **Material Optimization:** Source lower-carbon alternatives or increase recycled content for high-impact components.

📦 **Use Phase (42.8%):** Energy consumption by the end-user over the product's lifespan.

