carboncalcpcf.com

zindfjmzmr Carbon Footprint Dashboard

1.0 unit, factory_gate, China, GHG Protocol

24.824

Total kgCO2e/unit

Executive Summary

TOTAL PRODUCT FOOTPRINT

24.824

kgCO2e/unit

CARBON INTENSITY

24.824

kgCO2e/unit

TOP MATERIAL HOTSPOT

Aluminum Casing

6.00 kgCO2e

PRIMARY EMISSION SCOPE

Scope 3

22.574 kgCO2e

Lifecycle Stage Breakdown

Use Phase	12.500 kgCO2e (49.18%)
Materials Acquisition & Processing	10.050 kgCO2e (39.54%)
Manufacturing Phase	2.250 kgCO2e (8.85%)
Transport & Distribution	0.618 kgCO2e (2.43%)
End-of-Life Phase	-0.594 kgCO2e (Net Credit)

Material Carbon Impact

Aluminum Casing	6.00 kgCO2e
Electronic Components	2.50 kgCO2e
Plastic Housing	0.70 kgCO2e
Packaging (Cardboard)	0.45 kgCO2e
Copper Wire	0.40 kgCO2e

Highlights & Key Insights

The **Product Use Phase** is the largest contributor to the total carbon footprint, accounting for **50.4%** of emissions, primarily from electricity consumption over its lifespan.

Materials Acquisition & Processing is the second most significant hotspot, representing **40.5%** of the total footprint, with Aluminum Casing being the highest impact material.

The **End-of-Life Phase** shows a **net carbon credit of -2.4%**, indicating positive impacts from high recyclability and avoided virgin material production.