

CONNECTED HOME THERMOSTAT

Siemens EcoTech Profile

Sleek home automation thermostat model RDZ100ZB



Minimum material use

The complexity of the device's design is reduced, leading to a decrease in manufacturing CO₂ emissions and a decrease in the total product weight compared to its predecessor.



Packaging

The total weight of the packaging and the use of plastic is reduced compared to its predecessor.



Energy efficiency

The device's energy consumption is reduced compared to its predecessor.



Maintenance possible / Updatability

Minimal maintenance is required, and firmware updates are available through the app via Zigbee protocol.



Upgradability

The device is easily upgradable, unlocking additional functionalities and enhancing capabilities to meet changing industry demands.



EPD Type II or Type III available

The Environmental Product Declaration (EPD) provides transparency on the environmental impact of the product throughout its life cycle. Type II according to ISO 14021 including Life Cycle Impact Assessment (LCIA). Type III verified and certified according to ISO 14025.



Scan for [Environmental Product Declarations \(EPD\)](#) and further technical information.



Range of application

This Siemens EcoTech Profile is valid for the RDZ100ZB Connected Home Thermostat.

Further information on the product

Sustainable materials:



Minimum material use

- The total product weight decreased by **31%** compared to its predecessor.
- **≈ 1 kg** of manufacturing CO₂ emissions are saved by reducing PCBA weight.



Packaging

- The packaging weight is reduced by **35%** compared to its predecessor.
- The use of plastics in the packaging is reduced by more than **95%** compared to its predecessor.

Optimal use:



Energy efficiency

- Compared to its predecessor, the energy consumption is reduced by **90%** through the use of optimized communication protocols e.g., Zigbee, and by changing the screen from LCD to dotted LED.



Maintenance possible / Updatability

- Updates can be executed from anywhere, reducing the need for travel on-site.
- The firmware updates help protect and preserve the device's functionalities, reducing the need for replacements or additional components.

Value recovery:



Upgradability

- The strategically developed modular design facilitates seamless software and hardware upgrades.
- The need to replace the device is reduced, thereby decreasing material waste.
- Upgrades are facilitated through the app, releasing features such as weather forecasts based on home location, improved scheduling, heating logics, and more.

Our production facilities

Our goal is clear: All Siemens production facilities and buildings worldwide are to achieve a net zero-carbon footprint by 2030. Today, all Siemens EcoTech products are manufactured in production facilities using **100% renewable electricity**.

And the ambitions go much further. The management systems implemented in our production facilities reduce the environmental impacts of our sites. Furthermore, we ensure fair treatment and respect for our people. More information about the 360° view on Siemens' sustainable transformation: [Learn more about our DEGREE framework](#)



Scan for more information on the [Siemens EcoTech framework](#)



TÜV Rheinland has independently validated the assessing methodology behind this product sheet's data evaluation according to ISO 14020 and 14021 standards.

Our Robust Eco Design process

The Siemens Robust Eco Design (RED) approach provides the foundation for integrating Ecodesign systematically into our product development and allows us to derive Ecodesign specifications that are advantageous from an environment point of view while meeting our own sustainability goals as well as those of our customers and suppliers. The RED approach involves three phases:

Application perspective

Definition of relevant product families, identification, and prioritization of Ecodesign requirements from stakeholder expectations.

Solid foundation

LCA-based assessment of environmental impacts for representative products along the entire life cycle, communicated via EPD.

Dematerialization

Evaluation of quantitative environmental impacts of Ecodesign and of further requirements, derivation of improved design specifications wherever reasonable.

