



éCO₂ User Guide



Air Quality Monitor

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1. Introduction

Welcome to the complete guide of zAlps' eCO2, your ally for healthy indoor air.

The quality of the air we breathe in our indoor spaces plays a vital role in our health and well-being. Adequate monitoring of carbon dioxide (CO2) concentration, temperature, and relative humidity is crucial to ensure a safe and comfortable indoor environment.

This guide has been specially designed to help you make the most of your eCO2 by providing you with comprehensive information on its use, operation, and best practices for maintaining quality indoor air. By exploring the different sections of this guide, you will not only learn how to use the eCO2 effectively but also understand why it is important to monitor indoor air quality.

We will begin by addressing the issues related to indoor air quality, highlighting the importance of monitoring CO2 concentration. You will discover how zAlps' eCO2 can become your essential partner in this endeavor, providing accurate data to maintain a healthy indoor environment.

Next, we will review the essential recommendations for ensuring good indoor air quality, with an emphasis on the importance of ventilation. You will learn why ventilation is crucial for removing indoor air pollutants and maintaining optimal living conditions.

In the second part of the guide, we will explore the eCO2 in detail, from its setup to its daily operation. You will understand how to install it correctly for precise measurements of CO2 concentration, temperature, and relative humidity. We will also provide you with information on data interpretation, device calibration, configuration settings, and much more.

We will also address the maintenance and usage precautions of your eCO2, to ensure its durability and proper functioning.

We encourage you to read through this guide carefully, as it will help you optimize the use of your eCO2 and take steps to maintain quality indoor air. A better understanding of the importance of monitoring indoor air quality will enable you to create a healthier and more comfortable environment for you and your family.

2. Indoor Air Quality

2.1. Challenges

The air we breathe inside our homes, offices, and other enclosed spaces plays a crucial role in our health and well-being. Indeed, we spend on average nearly 90% of our time in enclosed environments. Therefore, the quality of this indoor air is of paramount importance, although often underestimated.

Awareness of indoor air pollution has significantly increased over the past few decades. However, the majority of people are not fully aware of the health risks associated with indoor air quality. Many studies show that residents are often surprised to learn that they are more exposed to air pollution inside than outside their homes.

In this context, CO2 monitors like the eCO2 play an essential role. They not only monitor CO2 levels but also other indicators of indoor air quality. These devices help users take proactive measures to improve air quality, including adequate ventilation.

Indoor air quality has a direct impact on health. High levels of pollutants can cause headaches, eye and respiratory tract irritations, as well as more serious problems like asthma and other respiratory diseases. Awareness of these issues and the use of indoor air quality monitoring tools can greatly contribute to improving public health.

Indoor air quality is a major public health issue. CO2 monitors, like the eCO2, offer a practical solution for monitoring and improving this crucial aspect of our daily environment. It is essential that we take steps to protect ourselves from the hidden dangers of indoor air pollution.

2.2. Carbon Dioxide

2.2.1. Importance of CO2 Monitoring

Monitoring carbon dioxide (CO2) in indoor spaces is crucial for maintaining a healthy environment and preventing various health issues. CO2, primarily produced by human respiration, is a key indicator of indoor air quality. High levels of CO2 can indicate insufficient ventilation, leading to an accumulation of pollutants and a decrease in oxygen, which can negatively affect health and well-being.

The adverse effects of poor indoor air quality, including high levels of CO2, can include headaches, fatigue, concentration problems, and in the long term, may contribute to respiratory and cardiovascular diseases. CO2 monitoring not only helps identify ventilation issues but also plays an essential role in implementing solutions to improve air quality, such as enhancing ventilation systems and adopting healthier living practices.

Awareness of the importance of indoor air quality is also crucial. Most people spend a significant portion of their time indoors, yet the air quality in these environments is often overlooked. By actively monitoring CO2 and taking steps to maintain healthy levels, it is possible to create safer and more comfortable indoor environments for living and working.

CO2 monitoring is an important step towards understanding and improving indoor air quality. It not only protects individual health but also contributes to creating more sustainable and environmentally friendly environments.

2.2.2. éCO2 by zAlps: Your Partner for Healthy Indoor Air

We understand how important your well-being and that of your family are, which is why we designed eCO2 to be a trusted partner in the quest for healthier indoor air.

With eCO2, you benefit from the quality and reliability of zAlps, a company based in France, in the heart of the beautiful Alps. We are committed to offering you a high-quality product, responsive customer service, and informative resources to help you make informed decisions about indoor air quality.

When you choose eCO2, you opt for an indoor air quality controller that combines accuracy, ease of use, and durability. We are here to support you at every step, from the initial setup to understanding the data, adjusting alerts, and much more. Your satisfaction is our priority, and we are proud to have you as a customer.

In this guide, we will explore all the features and benefits of eCO2, so that you can fully enjoy your device and live in a healthier environment. You have made the right choice by choosing eCO2 from zAlps, and we are here to support you in your journey towards better indoor air quality.

2.3. Recommendations

2.3.1. Importance of Ventilation

Ventilation is an essential element for maintaining good air quality inside our indoor spaces, whether in our homes, offices, schools, or other places where we spend the majority of our time. This importance stems from the fact that indoor air can be contaminated by various pollutants and harmful gases, including carbon dioxide (CO2), volatile organic compounds (VOCs), excessive humidity, and many others.

One of the main components of the air we breathe indoors is CO2. Carbon dioxide is an odorless and colorless gas produced by human respiration, the combustion of fossil fuels, heating appliances, cooking, and other daily activities. If CO2 levels in an indoor space become too high, it can lead to a decrease in air quality, which can impact our health and well-being.

Ventilation plays a crucial role in allowing the renewal of indoor air. It involves the exchange of stale air, which contains pollutants and an increased concentration of CO2, with fresh outdoor air. This process removes contaminants, regulates CO2 levels, and maintains a healthy atmosphere inside.

There are several means to achieve effective ventilation. Natural ventilation, which involves opening windows, doors, or vents in our buildings, allows outdoor air to enter and circulate inside. Controlled mechanical ventilation systems (CMVs) are also commonly used to automate this process. They draw stale air and expel it outside through a network of ducts and fans.

Besides its benefits in terms of indoor air quality, ventilation can also have economic implications. In winter, for example, excessive humidity in indoor air can make a room more difficult to heat, increasing energy consumption. Adequate ventilation helps regulate humidity and reduce heating costs.

Ventilation is essential to ensure a healthy and comfortable indoor environment. It contributes to maintaining acceptable CO2 levels, eliminating air pollutants, preventing mold formation, and generally improving the quality of life.

2.3.2. Recommendations for Good Ventilation

Maintaining good indoor air quality is essential for our health, comfort, and well-being. Here are some recommendations and best practices to ensure adequate ventilation in your indoor spaces:

1. **Regularly Air Out:** The first and simplest practice is to open windows and doors from time to time to allow outdoor air to circulate inside. It is recommended to do this several times a day, even for just a few minutes.
2. **Use a Mechanical Ventilation System:** Controlled mechanical ventilation (CMV) systems are designed to ensure a constant renewal of indoor air. They are particularly effective in well-insulated buildings. Make sure your CMV is properly maintained and functioning optimally.
3. **Adjust Ventilation Based on Activity:** When carrying out activities that generate more CO₂, such as cooking, cleaning, or when you have guests, increase ventilation to more quickly remove contaminants. Some ventilation systems allow you to adjust the speed based on needs.
4. **Maintain an Adequate Indoor Temperature:** Excessively hot or cold indoor temperatures can affect air quality. Ensure that your heating or air conditioning system is working properly to maintain a comfortable temperature.
5. **Control Humidity:** Excessive humidity promotes the growth of mold and other pollutants. Use a dehumidifier if necessary, especially in areas prone to moisture.
6. **Avoid Indoor Smoking:** Smoking is a major source of indoor air pollution. Avoid smoking indoors, as tobacco smoke contains many harmful chemicals.
7. **Use Air Purifiers:** If you have specific concerns about air quality, consider using air purifiers with HEPA filters to remove suspended particles.
8. **Avoid Harmful Chemicals:** Use low-VOC cleaning products and building materials to minimize indoor air pollution.
9. **Check Ventilation in Enclosed Spaces:** When you are in poorly ventilated indoor spaces, such as basements or garages, be aware of the CO₂ levels that can accumulate. Ensure that these spaces are properly ventilated during prolonged use.
10. **Monitor CO₂ Levels:** A CO₂ monitoring device, like the eCO₂, can help you track carbon dioxide levels in your indoor space and take appropriate action.

By following these recommendations, you contribute to maintaining healthy and high-quality indoor air. Good ventilation is essential to reduce the risks of health problems related to indoor air pollution, such as headaches, allergies, respiratory irritations, and it generally improves your comfort in daily life. Make sure to consider these practices to enjoy a safe and pleasant indoor environment.

3. eCO2 Indoor Air Quality Controller

3.1. Getting Started

When you receive your eCO2 from zAlps, you are ready to start monitoring indoor air quality in a simple and effective way.

3.1.1. Box content

When you open the eCO2 box, you will find everything you need to get started. The contents of the box have been carefully selected to ensure a quick and hassle-free installation. Here is what you will find inside:

[eCO2 Air Quality Monitor](#)

The core of your indoor air quality monitoring system. eCO2 is designed to be easy to use, allowing you to accurately monitor CO2 levels, temperature, and relative humidity.

[Two AA Alkaline Batteries](#)

We have included two AA / LR6 type alkaline batteries to ensure a battery life of up to 4 years (for measurements every 10 minutes). You won't have to worry about finding batteries to get started.

[Calibration Tool](#)

This handy tool is included to allow you to switch between temperature measurements in °C or °F according to your preferences. Later, it will also help you perform the device calibration, ensuring accurate measurements.

[Quick Start Guide](#)

This simple and informative guide will walk you through the steps of getting your eCO2 up and running. You will find clear instructions for quickly using your device.

[Customer Service Contact Leaflet](#)

On the outside of the leaflet, you will find information on how to contact our customer service if you have any questions or need assistance. We are here for you.

[QR Code for Warranty Registration](#)

On the back of the contact leaflet is a QR Code that will allow you to easily register your eCO2 warranty to enjoy exclusive benefits.

With this complete content, you are ready to start your indoor air quality monitoring experience with eCO2. Let us guide you through the following steps so you can fully enjoy your device and create a healthier environment in your indoor spaces.

3.1.2. Warranty Registration

Registering your eCO2 warranty is a simple step that allows you to benefit from exclusive advantages and dedicated support. At zAlps, we place great importance on customer satisfaction, and warranty registration is our way of providing you with premium service. To register your eCO2 warranty, we have set up a simple procedure that can be completed in a few easy steps. You have two options for registering your warranty:

[Option 1: Registration via Facebook Messenger](#)

- Simply scan the QR Code provided in your eCO2 packaging with your smartphone.

- You will be redirected to our chat page on Facebook Messenger.
- Follow the instructions to enter your order number and email address.
- Confirm your registration.
- You will receive an email confirmation indicating that your warranty has been successfully registered.

Option 2: Registration via email

- If you do not have Facebook or prefer an alternative method, we are here for you.
- Simply send an email to our support team at serviceclient@zalps.fr
- Include your names and order number in the message.
- We will register your warranty for you and send you an email confirmation.

Registering your eCO2 warranty offers many exclusive benefits for you:

Priority Support

As a registered customer, you benefit from access to our fast and personalized customer assistance. If you have any questions, concerns, or need help, our team is there for you with quick responses.

Product Updates

You will receive the latest information and updates related to your eCO2 ahead of everyone else. Stay up-to-date with features and improvements for an optimal experience.

Exclusive Offers

As a registered customer, you will also enjoy special offers reserved for members. Get exclusive discounts and promotional offers on our products and accessories.

Priority Access to the Testers Club

You will have priority access to our exclusive Testers Club. To learn more about the exciting opportunities this club offers, visit our page <https://zalps.fr/club-des-testeurs/>

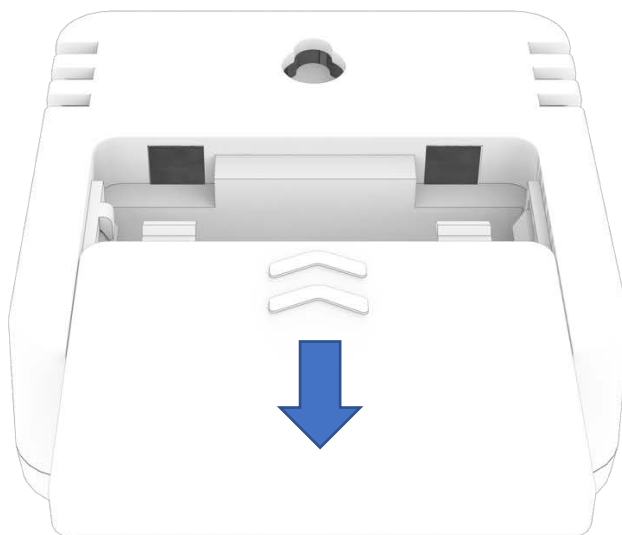
Registering your eCO2 warranty is a simple step that reinforces our commitment to your satisfaction. We are delighted to have you as a customer, and we are here to ensure that your experience is the best possible.

Do not hesitate to register your warranty today to enjoy these exclusive benefits.

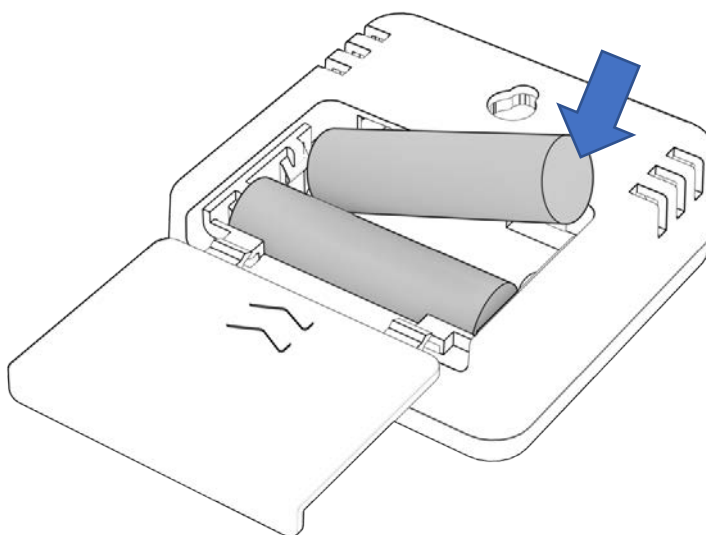
3.1.3. Battery Installation

Installing the batteries in your eCO2 is a simple and quick step, allowing you to power up your device. Follow these steps to correctly install the batteries:

1. **Open the Battery Compartment:** To access the battery compartment, turn your eCO2 around and locate the compartment door on the back of the device. The illustration alongside shows you how to slide this door downwards to open it.



2. **Insert the Batteries Correctly:** Once the compartment is open, insert the batteries respecting the polarity. Make sure to align the positive (+) side of the battery with the positive mark on the compartment and the negative (-) side with the negative mark. It is generally easier to insert the positive side of the battery into the compartment first, followed by the negative side.



3. **Close the Battery Compartment:** Once the batteries are correctly inserted, close the compartment by reversing the action from step 1. Make sure that the compartment door locks into place.



Once you have installed the batteries and closed the compartment, your eCO2 will automatically power on. You will see the initial readings displayed within just a few seconds.

It is important to note that the eCO2 is calibrated in the factory before shipping, which means that it is not necessary to perform a calibration when you first set it up. Therefore, you can start monitoring indoor air quality without delay.

3.1.4. Alert Thresholds and Measurement Frequency

When you first start up your eCO2, the device is ready to use with default factory settings. These settings have been carefully chosen to offer an optimal indoor air quality monitoring experience, but they are also customizable to suit your specific needs.

Here is what you need to know about the initial setup of your eCO2:

Alert Thresholds: The default alert thresholds are set at 1000 ppm (amber threshold) and 1500 ppm (red threshold) for CO2 concentration. These thresholds are important indicators for assessing indoor air quality. The amber threshold will alert you when the CO2 concentration reaches a level where ventilation may be necessary and is advised, while the red threshold indicates a high concentration that requires immediate action.

Customization of Alert Thresholds: You have the option to adjust these alert thresholds according to your preferences or the local standards of your country. Detailed instructions can be found in the section dedicated to customizing alert thresholds in this user guide.

Measurement Frequency: The default measurement frequency is set to an interval of 1 minute between CO2 measurements. This frequency provides you with near real-time monitoring of indoor air quality. However, we understand that monitoring needs can vary. You have the option to adjust the measurement frequency according to your preferences, whether it be at 1, 2, 5, or 10 minutes. Instructions for changing the measurement frequency are provided in the corresponding section of this user guide.

By customizing these settings, you can tailor the eCO2 to your specific needs, whether it's to monitor a particular environment or to comply with local regulatory requirements. The sections dedicated to customizing alert thresholds and measurement frequency will guide you through the process, allowing you to make the most of your device to ensure optimal indoor air quality.

3.2. Device Placement

The placement of your eCO2 is crucial to ensure effective monitoring of carbon dioxide (CO2) levels and to meet your specific needs. Whether you want to monitor CO2 levels in living spaces or maintain a high CO2 level in a grow room for plants, here are recommendations for both use cases:

3.2.1. Device Installation

Installing your eCO2 is simple and flexible, offering you the option to position it on a flat surface, such as a table, desk, countertop, or piece of furniture, or to mount it on the wall according to your preferences. If you choose to mount it on the wall, you will have a convenient way to monitor air quality without cluttering your workspace surfaces.

Installation on a Flat Surface:

When placing the eCO2 on a flat surface, make sure to choose a location where it can perform measurements stably and accurately. Avoid placing it in the immediate vicinity of potential sources of disturbance, such as heating appliances, fireplaces, or ventilation vents, as this could affect the measurements. Simply place the eCO2 on the chosen surface, and it is ready to operate.

Wall Mounting:

If you prefer to mount your eCO2 on the wall, we have made this process easy for you. You will need only one screw to complete this installation. Here is how to proceed:

1. Choose the ideal location on the wall where you wish to mount the eCO2. Ensure it is at an appropriate height for convenient use and that the device remains protected from any source of disturbance.
2. Use a drill to make a hole in the wall, using a drill bit suitable for the mounting screws. Be sure to follow the specifications of your screw.
3. Insert a wall plug and then the screw into the hole you have drilled, leaving the head of the screw protruding from the wall.
4. At the back of the eCO2, you will find a designated spot for wall mounting. Place the eCO2 onto the screw so that the head of the screw fits into it, thus ensuring a secure attachment.
5. Check that the eCO2 is firmly fixed to the wall.

We recommend using a screw with a maximum diameter of 4 mm with a flat or countersunk head of a maximum diameter of 8 mm for this operation.



Regardless of the installation mode you choose, your éCO2 is ready to continuously monitor indoor air quality, thus offering you a better understanding of the environment in which you live or work. Once installed, configure it according to your preferences and monitor air quality with ease and precision.

3.2.2. First Use Case - Control in Living Spaces

The main objective of this use case is to ensure effective control of carbon dioxide (CO2) levels in indoor living spaces. By closely monitoring CO2 concentration, you can maintain a healthy and comfortable indoor environment for yourself, your family, or your colleagues. Adequate CO2 control will enable you to take proactive measures to prevent excessively high levels of CO2, which can negatively impact health and well-being. This use case aims to provide you with the necessary information to optimally place and configure your éCO2 in living spaces, thus allowing you to live in a healthier environment.

Advice on the Ideal Location:

- **Central Position:** Place the éCO2 in a central area of the room where you want to monitor indoor air quality. This will allow capturing representative data from the entire room.
- **Installation Height:** Mount the éCO2 at a height of about 1.5 to 1.8 meters above the floor. This position is ideal for measuring CO2 concentration at human breathing height.
- **Avoid Artificial CO2 Sources:** Ensure that the device is not placed too close to artificial CO2 sources such as heaters, stoves, or fireplaces. This could distort the measurements.
- **Avoid Direct Air Currents:** Avoid placing the éCO2 directly in front of open windows or doors, as air currents can affect the measurements. Place it in a location where it is not exposed to constant airflow.
- **Monitor Critical Areas:** If you have specific areas where CO2 concentration is particularly concerning, consider installing multiple éCO2s in different parts of the room.

3.2.3. Second Use Case – Plant Mode (Use in a Grow Room)

The main objective of this use case is to maintain a high level of carbon dioxide (CO2) in a grow room to promote plant growth. Accurate monitoring of CO2 levels is essential to create an optimal environment for photosynthesis and plant health. By maintaining adequate CO2 levels, you can stimulate growth, improve the quality, and increase the yield of your crops. This use case will provide you with specific recommendations for placing and configuring your éCO2 to optimize the growth of your plants in a grow room, whether you are an amateur or professional gardener.

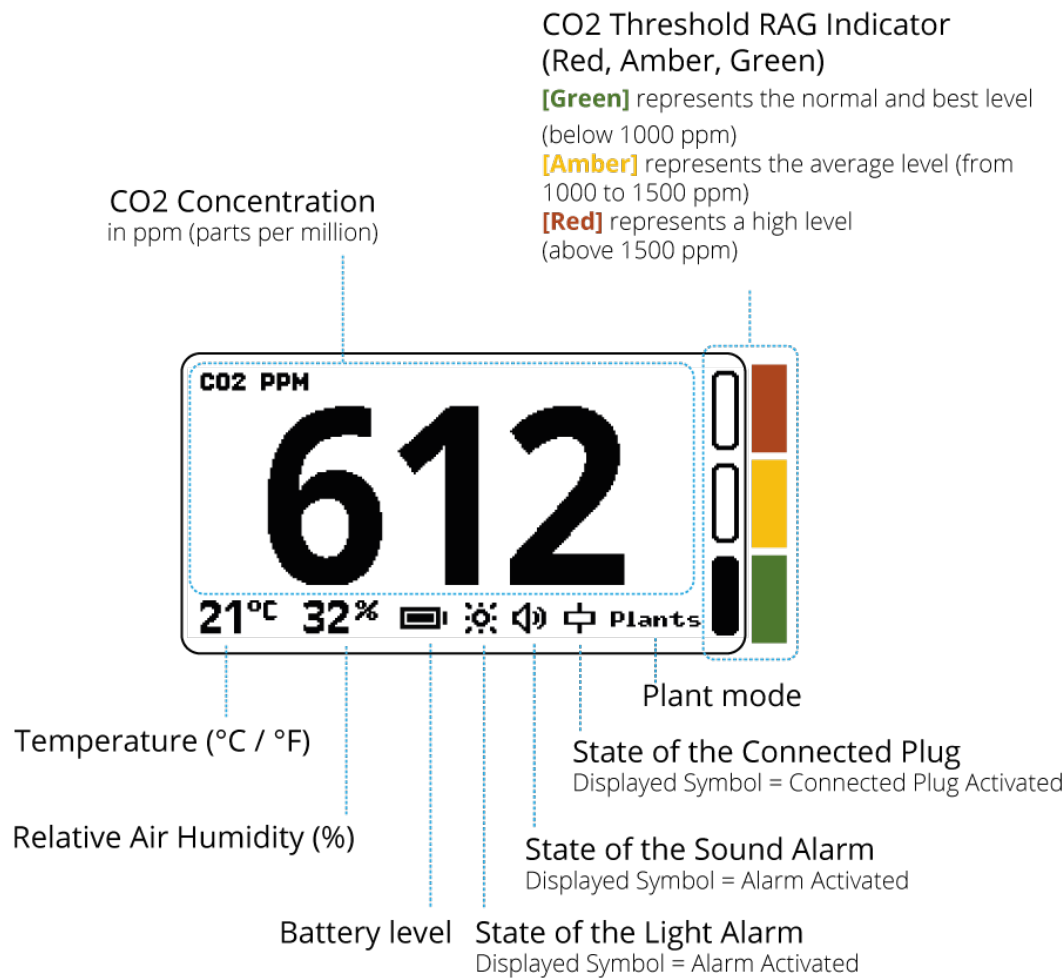
Advice on the Ideal Location:

- **Proximity to Plants:** Place the éCO2 near the plants you are growing, at a height of about 30 to 60 cm above the ground. This will allow monitoring of CO2 levels at the location where the plants need it most.
- **Avoid Obstructions:** Ensure there are no direct obstructions between the éCO2 and the plants, so that the measurements are representative of the growing area.
- **Monitor Optimal Levels:** Use the data from the éCO2 to maintain optimal CO2 levels for plant growth. Higher CO2 levels can stimulate photosynthesis and promote vigorous growth.
- **Avoid CO2 Leaks:** Ensure that the grow room is airtight to prevent CO2 leaks, which ensures that the éCO2 can maintain optimal levels.

By following these recommendations, you will be able to make the most of your éCO2, whether it's for monitoring and maintaining healthy CO2 levels in living spaces or for promoting plant growth in a grow room.

3.3. éCO2 Display and Information Shown

The display of your éCO2 is your window to indoor air quality. It shows several essential pieces of information to enable you to effectively monitor the environment of your space.



Here is what you can find on the éCO2 display:

- **CO2 Concentration (ppm):** The measurement of CO2 concentration in the ambient air is displayed in parts per million (ppm). This value indicates the amount of carbon dioxide present in the air you breathe.
- **Air Temperature (°C or °F):** The ambient temperature is displayed in degrees Celsius (°C) or Fahrenheit (°F), depending on your preferences. This allows you to monitor the temperature of your indoor space.
- **Relative Humidity (%):** The relative humidity is expressed as a percentage (%) and informs you about the humidity level in the air. This can help you maintain a comfortable environment.
- **Battery Status:** An icon representing the battery state indicates the remaining charge level. When this icon is empty or near empty, it is time to replace the batteries.
- **Auditory and Visual Alerts:** Auditory and visual alerts are represented by corresponding icons. If an alert is activated, the corresponding icon appears on the display.
- **Connected Outlet:** An icon indicates whether the connected outlet (optional) is activated or deactivated. It can be used to control devices, such as ventilation, based on CO2 levels.

- 'Plants' Mode: If you are using your éCO2 in a grow room for plant growth, the 'Plants' mode can be activated. This maintains an optimal CO2 level for plant growth.
- Three-Level Indicator (Green, Amber, Red): This indicator, similar to a traffic light, represents the CO2 thresholds. The green level indicates that CO2 is below 1000 ppm, the amber level indicates a concentration between 1000 and 1500 ppm, and the red level signals a concentration above 1500 ppm. The black rectangle indicates the current threshold reached.

Your éCO2 can operate in two modes: Standard mode and Plants mode. The Standard mode is the default setting, ideal for maintaining the lowest possible CO2 levels. The Plants mode is intended for plant cultivation and maintains a high CO2 level to promote their growth. To switch between these modes, hold button 1 for 4 seconds on the top of the éCO2.

The éCO2's display is based on electronic ink technology, similar to a printed paper sheet. This screen is energy-efficient and ensures optimal readability, even in bright light. However, it is not backlit, so make sure you have an ambient light source to view it.

When the battery icon is empty or near empty, it is time to replace the batteries to ensure continuous operation of your éCO2.

3.4. Measuring CO2 Concentration

3.4.1. Carbon Dioxide (CO2): Understanding the Concentration Level in the Air

Carbon Dioxide (CO2) is a gas that naturally occurs in our atmosphere. It is produced by various processes, including human respiration, the combustion of fossil fuels, and the decomposition of organic materials. CO2 is essential to life on Earth as it plays a major role in the carbon cycle and photosynthesis, a process by which plants convert CO2 into oxygen and glucose.

However, the concentration of CO2 in the air can vary depending on various factors, including human activities, ventilation of indoor spaces, and environmental conditions. This is why it is crucial to monitor CO2 levels to ensure indoor air quality.

3.4.2. Parts Per Million (ppm): The Unit of Measurement for CO2

CO2 concentration is measured in parts per million (ppm), which represents the number of CO2 molecules present per million air molecules. For example, if a space contains 1,000 ppm of CO2, it means there are 1,000 CO2 molecules for every million air molecules in that space.

3.4.3. CO2 Concentration Thresholds in Outdoor Air

The levels of CO2 in outdoor air typically hover around 420 ppm. This represents the normal concentration of CO2 in the atmosphere outside of buildings or enclosed spaces. However, inside buildings, CO2 levels can increase due to human activity and insufficient ventilation.

3.4.4. Importance of CO2 Monitoring

Monitoring CO2 concentration in indoor spaces is crucial. High levels of CO2 can indicate insufficient ventilation, leading to an accumulation of pollutants and a reduction in oxygen, which can negatively impact health and well-being. Typical reference values for indoor air quality include:

- **Less than 800 ppm:** Optimal CO2 levels for fresh and healthy indoor air, promoting concentration and well-being.
- **Between 800 and 1,000 ppm:** Moderate CO2 levels, indicating adequate ventilation, but continuous monitoring is recommended to maintain air quality.
- **Between 1,000 and 1,500 ppm:** High CO2 levels, suggesting insufficient ventilation, which can lead to reduced air quality, headaches, fatigue, and long-term concentration issues.
- **More than 1,500 ppm:** Very high CO2 levels, indicating inadequate ventilation, which can lead to more serious long-term health issues.

CO2 monitoring not only helps identify ventilation issues but also plays a crucial role in implementing solutions to improve air quality, such as enhancing ventilation systems and adopting healthier living practices. It contributes to creating a safer and more comfortable indoor environment.

3.5. Temperature Measurement

Measuring and controlling temperature in our indoor spaces is fundamental to ensuring the comfort and well-being of occupants. The indoor temperature directly affects our sense of comfort, productivity, and quality of life. This is why éCO2 offers you the ability to measure temperature.

Maintaining an appropriate indoor temperature offers numerous benefits. Here's why measuring and controlling temperature is essential:

- **Thermal Comfort:** A well-regulated indoor temperature allows occupants to feel comfortable in their environment. This promotes relaxation, concentration, and better sleep.
- **Health and Well-being:** Excessively hot or cold temperatures can impact health. An adequate temperature helps prevent health issues related to extreme climate conditions.
- **Energy Efficiency:** Temperature control allows for efficient use of heating and air conditioning systems, which can lead to energy savings and reduced energy costs.
- **Work Performance:** In work environments, a well-regulated temperature can enhance employee productivity by creating optimal working conditions.

The ability to choose between Celsius (°C) and Fahrenheit (°F) units ensures that you can monitor and control the temperature of your indoor space accurately and according to your local preferences. This feature of éCO2 allows you to make informed decisions about comfort and energy efficiency, thus contributing to creating an optimal indoor environment for living and working.

3.6. Measuring Relative Humidity

Measuring relative humidity is a key element in monitoring indoor air quality. Relative Humidity (RH) refers to the amount of moisture in the air relative to the maximum amount of moisture the air can hold at a given temperature. It is expressed as a percentage.

Measuring relative humidity is of considerable interest for several reasons:

- **Respiratory Comfort:** An adequate level of humidity in the indoor air can contribute to respiratory comfort. Too dry air can cause irritation of the respiratory tract, skin problems, and dry mucous membranes, while excessively humid air can promote the growth of mold and mites.
- **Health:** Relative humidity plays an important role in preventing respiratory infections. Too dry air can make the respiratory tract membranes more vulnerable to viral and bacterial infections.
- **Thermal Comfort:** Relative humidity affects how we perceive temperature. More humid air may feel warmer, while dry air may feel cooler.
- **Preservation of Property:** In some environments, controlling relative humidity is crucial for the preservation of items such as musical instruments, artworks, ancient documents, and materials sensitive to moisture.
- **Energy Efficiency:** Controlling relative humidity can help improve the energy efficiency of heating, ventilation, and air conditioning systems because too humid air may require more energy to heat or cool.

Monitoring relative humidity with éCO2 allows you to maintain an optimal indoor environment by avoiding too high or too low humidity levels. This contributes not only to your comfort and health but also to the preservation of your property and the energy efficiency of your indoor space. With éCO2, you have a comprehensive tool to proactively monitor and improve indoor air quality.

3.7. Recommended Reference Levels

Monitoring indoor air quality with éCO2 allows you to maintain optimal levels for various parameters. Here are the recommended reference levels for CO2, temperature, and relative humidity in different areas of your indoor space.

3.7.1. CO2

The ideal level of CO2 in indoor air should be between 400 and 800 ppm (parts per million). This indicates adequate ventilation and fresh air.

3.7.2. Temperature

- **Bedroom:** The ideal temperature for a bedroom generally ranges from 16°C (60°F) to 20°C (68°F) to promote comfortable sleep.
- **Living Space:** In living spaces, a comfortable temperature range is between 20°C (68°F) and 24°C (75°F).
- **Office:** For a comfortable and productive work environment, maintain the temperature between 20°C (68°F) and 22°C (72°F).

3.7.3. Relative Humidity

- **Bedroom:** A relative humidity of 40% to 60% is generally recommended for the bedroom to prevent dry skin issues and promote quality sleep.
- **Living Space:** Maintain relative humidity between 30% and 60% in living spaces for optimal comfort.
- **Office:** For a comfortable work environment, maintain a relative humidity between 30% and 50%.

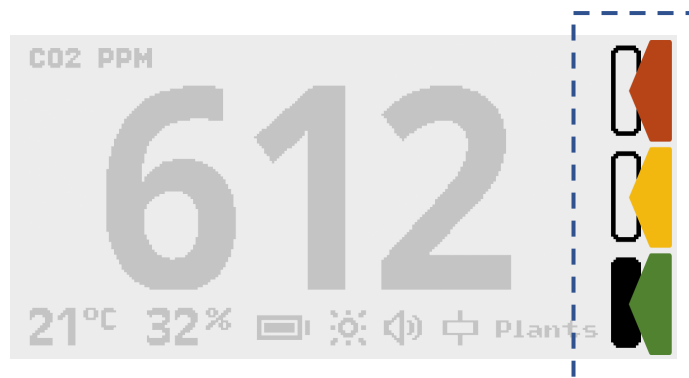
By following these recommendations, you can create a comfortable, healthy, and productive indoor environment. éCO2 helps you monitor these parameters and take measures to keep them within ideal ranges, thus ensuring your well-being and comfort daily.

3.8. Thresholds, Alerts, and Settings

3.8.1. Threshold Indicator

éCO2 is equipped with an intuitive Red Amber Green (RAG) indicator that functions like a traffic light to provide you with instant information about the air quality in your indoor space.

This indicator is located on the right side of the éCO2's display.



Here is how to interpret and understand the indicator:



Green: If the small black rectangle is positioned in front of the green color, it means that the CO2 concentration in your space is currently below 1000 ppm. This range is considered ideal for well-being and health. You are enjoying excellent air quality and a comfortable environment.



Amber : When the small black rectangle is positioned in front of the amber color, it indicates that the CO2 concentration is between 1000 ppm and 1500 ppm. Although this range is not alarming, it is recommended to take ventilation measures to improve air quality if it persists. Adequate ventilation can help maintain a healthier environment.



Red: If the small black rectangle is aligned with the red color, it means that the CO2 concentration in your space has exceeded 1500 ppm. Within this range, it is recommended to act immediately by ventilating the room to reduce the CO2 concentration. High levels of CO2 can lead to a reduction in air quality, potentially affecting your well-being.

The threshold indicator is a practical tool for monitoring air quality in real-time and taking proactive measures to maintain a healthy indoor environment. By keeping an eye on this indicator, you can quickly assess air quality and make informed decisions for your comfort and health.

3.8.2. Types of Alerts

éCO2 is equipped with two types of alerts to keep you informed of indoor air quality: auditory alerts and visual alerts. You have the option to combine them according to your preferences.

- **Auditory Alerts (Beeps):** When one of the alert thresholds is reached or exceeded, éCO2 will emit four sound signals (beeps) to alert you. These alerts are audible and can catch your attention even when you are not looking at the screen.
- **Visual Alerts (Flashing Light):** In addition to auditory alerts, éCO2 has a flashing light system. When alert thresholds are exceeded, flashing lights will signal the problem. This feature is particularly useful in environments where silence must be maintained.

You have the flexibility to choose between auditory alerts, visual alerts, or both simultaneously, depending on your personal preferences and your environment.

The default alert thresholds are set at 1000 ppm (amber threshold) and 1500 ppm (red threshold). These thresholds are fully adjustable to meet your specific needs or to comply with the local regulations of your region or country. Detailed instructions on how to customize these thresholds can be found in the section dedicated to configuring your éCO2.

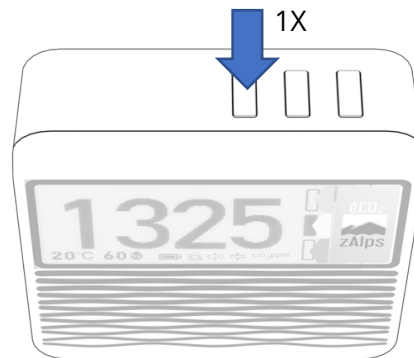
These alert features and visual indicators allow you to stay informed and take immediate action to improve indoor air quality, thus ensuring your comfort and well-being.

3.8.3. Activation/Deactivation of Alerts

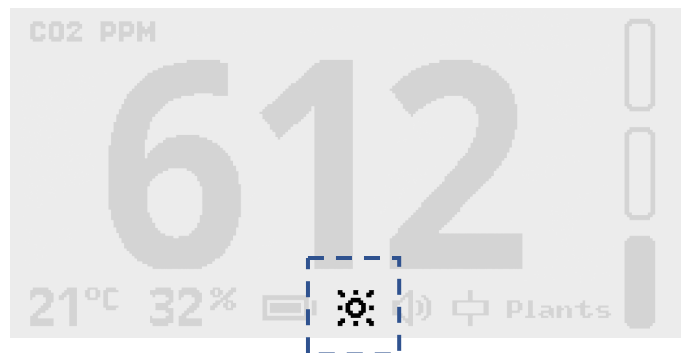
éCO2 offers you the flexibility to control auditory and visual alerts based on your preferences and your environment. Here is how to easily activate or deactivate these alerts:

Visual Alert

- To activate or deactivate the visual alert, press button 1 briefly once, located on the top of the device.

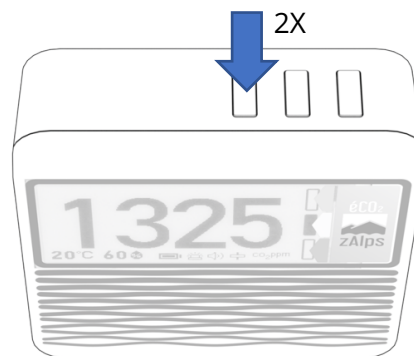


- If the visual alert is activated, a dedicated icon will be displayed on the screen to indicate its active state.

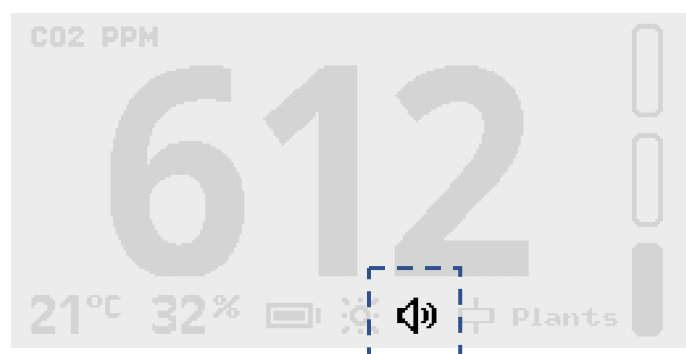


Auditory Alert

- To activate or deactivate the auditory alert, press button 1 briefly twice in succession.



- If the auditory alert is activated, a corresponding icon will appear on the lower part of the éCO2's screen to inform you.



Thanks to these customization options, you can choose to activate auditory alerts, visual alerts, or both, depending on your personal preferences and your environment. This flexibility allows you to make the most of your éCO2 by tailoring the alerts to your lifestyle and specific needs.

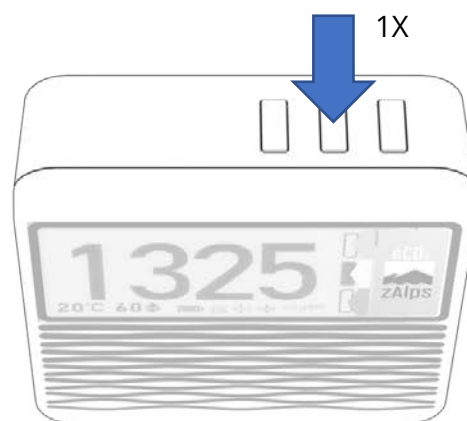
3.8.4. Setting Alert Thresholds

éCO2 offers you the opportunity to customize the alert thresholds according to your specific needs or to comply with local regulations in your region or country. The default alert thresholds are set at 1000 ppm (amber threshold) and 1500 ppm (red threshold).

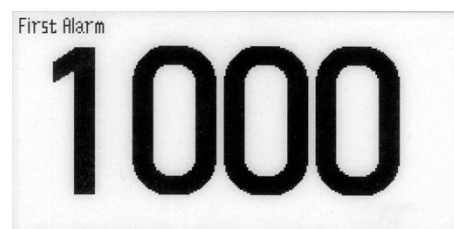
Setting threshold 1

To access the settings screen for threshold 1, corresponding to the amber threshold, follow these simple steps:

Press button 2 once, located on the top of the device.



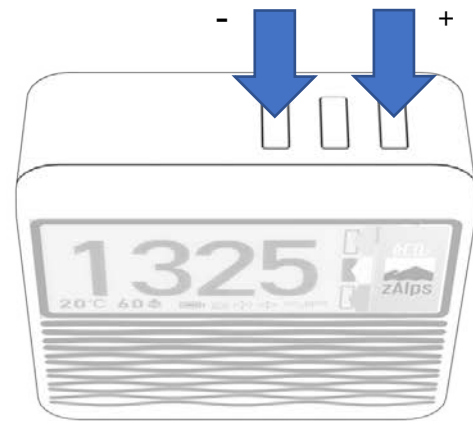
The screen will then display the message **First Alarm** at the top left, followed by the value corresponding to the threshold level.



You can change this value by pressing button 1 to decrease it or button 3 to increase it.

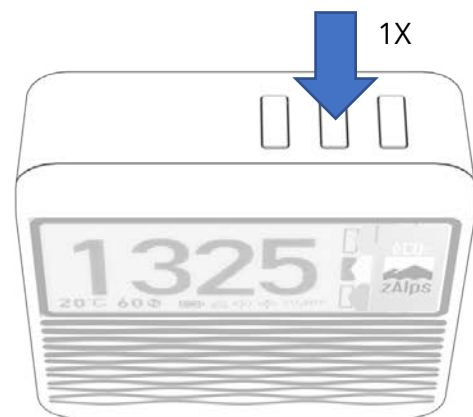
A **short press** on button 1 or 3 changes the value by **100 ppm**.

A **long press** on button 1 or 3 changes the value by **1000 ppm**.



⚠ It is important to note that the éCO2's screen uses electronic ink, which means it needs some time to update. Therefore, please be patient and avoid repeatedly pressing buttons 1 or 3 to allow the screen to display the values correctly.

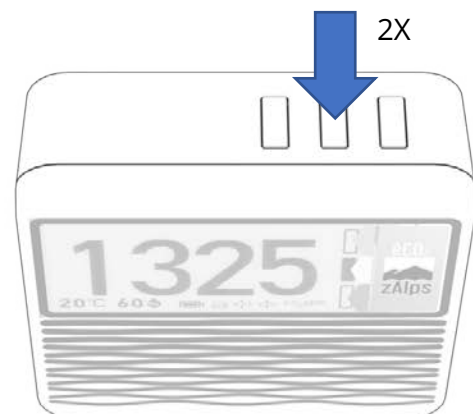
To **exit** the settings screen, simply **press button 2 once** again.



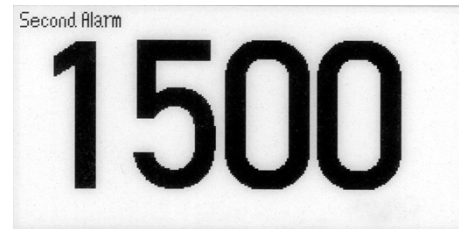
Setting threshold 2

If you wish to adjust threshold 2, which corresponds to the red threshold, follow these steps:

Press button 2 twice located on the top of the device.



The screen will then display the message **Second Alarm** in the top left, followed by the value corresponding to the threshold level.



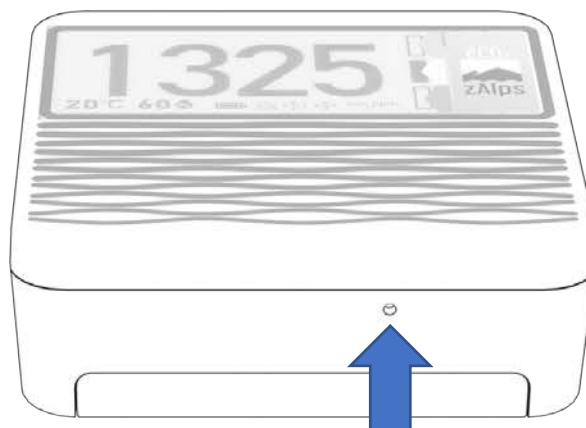
To adjust this threshold, proceed in the same way as for threshold 1.

Please note that the minimum configurable threshold for threshold 1 is 500ppm, and 600ppm for threshold 2.

3.8.5. Choosing the unit of measurement for temperatures

The éCO2 offers the flexibility to measure temperatures in degrees Celsius (°C) or degrees Fahrenheit (°F), according to your personal preferences. This setting can be easily adjusted by following the instructions below:

1. Locate button 4 located under the éCO2 housing. This button is accessible using the tool provided with your device.
2. Gently insert the tool into the hole provided for this purpose under the éCO2 housing.



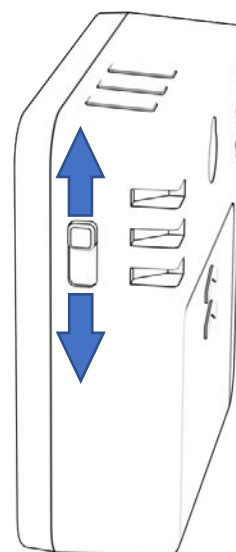
3. Briefly press button 4 using the tool. Make sure to apply firm but gentle pressure to avoid any damage to the device.
4. When you press the button, the temperature measurement unit will switch from Celsius to Fahrenheit, or vice versa, depending on your current preference.
5. Once the unit change is complete, gently remove the tool from the hole under the éCO2 housing.
6. Check the temperature display on the screen to ensure that the unit of measurement corresponds to your preferences.

Thanks to this convenient feature, you can easily adjust the temperature measurement unit to ensure that your éCO2 readings are displayed in your preferred unit.

3.8.6. Measurement frequency

To offer you optimal flexibility in monitoring the CO₂ concentration in the air, your éCO₂ is equipped with a frequency selection button.

This 4-position button is located on the right side of the éCO₂ housing. It allows you to choose the frequency at which your device takes CO₂ measurements, with options of 1, 2, 5 or 10 minutes.



The choice of measurement frequency depends on your specific use case or local regulations in force. For example, in France, the recommendations of the High Council of Public Health advocate a measurement frequency of 10 minutes for monitoring CO₂ in establishments receiving the public (ERP).

By adjusting the measurement frequency, you can customise your éCO₂ to meet your particular needs and the standards in force in your region. This flexibility allows you to closely monitor indoor air quality and take appropriate measures in case of significant variations in CO₂ concentration.

3.8.7. Parameters and their impact on battery life

It is important to note that the choice of measurement frequency on your éCO₂ has a direct impact on its battery life, i.e. the operating time of the device with a given set of batteries. The higher the measurement frequency (e.g. every 1 or 2 minutes), the more electrical energy the device consumes to perform these frequent measurements. Consequently, the battery life of the éCO₂ will be reduced compared to a less frequent measurement frequency (e.g. every 5 or 10 minutes).

In addition, the use of audible alerts, visual alerts and the connected socket (if used) also consumes electrical energy. Activating these features, although beneficial for keeping you informed in real-time of variations in CO₂ concentration, will impact the life of your batteries.

It is therefore advisable to choose the measurement frequency and use the alerts according to your specific needs and to maintain a balance between real-time monitoring and the battery life of the éCO₂. You can adjust these settings according to your use case to optimise the life of your batteries while maintaining effective monitoring of indoor air quality.

3.8.8. Default settings of the éCO₂

When you receive your éCO₂, it is configured with default settings for immediate use. These settings are as follows:

- **Measurement Frequency:** The measurement frequency is set to 1 minute by default. This means that your éCO₂ will take measurements of the CO₂ concentration in the air every minute.

- **Audible and Visual Alerts:** Audible and visual alerts are disabled by default. You will not receive audible signals or light flashes if the CO2 alert thresholds are exceeded.
- **Temperature Unit:** Temperatures are displayed in degrees Celsius (°C) by default. However, you can easily switch between Celsius and Fahrenheit according to your preferences.
- **Alert Thresholds:** The default alert thresholds are set to 1000 ppm for the first threshold (amber level) and 1500 ppm for the second threshold (red level). These thresholds are adjustable according to your needs or local regulations.
- **Optional Connected Socket:** By default, the optional connected socket is not activated. If you decide to use this feature to control external devices based on the CO2 level, you will need to activate it and configure your thresholds.

Please note that these default settings are designed for general use. You have the flexibility to customise these settings according to your specific use case and preferences. This user guide will provide you with detailed instructions on customising these settings to meet your particular needs.

3.9. Historical data

3.9.1. Automatic Data Recording

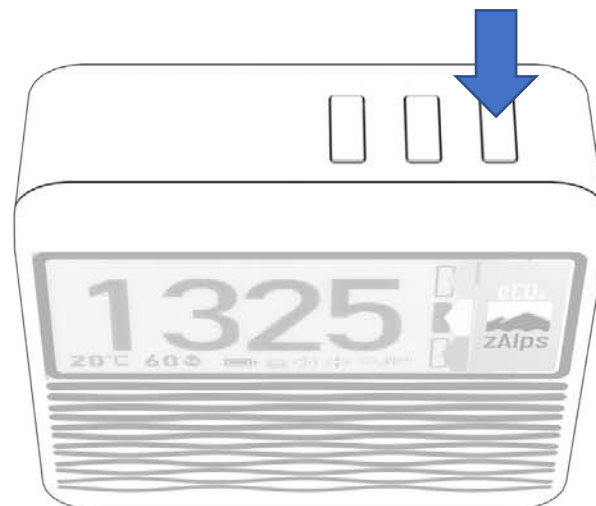
The éCO2 is a valuable tool for monitoring indoor air quality, and it automatically records carbon dioxide concentration data to provide you with a comprehensive overview of the evolution of air quality in your space. Here's how automatic data recording works:

- **Recording Frequency:** The éCO2 records CO2 data continuously as soon as it is turned on. You can choose from several recording frequencies, with a measurement every 1, 2, 5 or 10 minutes, depending on your specific needs. This means that for each unit of time (an hour or a day, depending on the selected display duration), éCO2 records a large number of measurements.
- **24-Hour and 28-Day History:** éCO2 maintains a complete history of CO2 concentration over 24 hours and 28 days (4 weeks). These two history durations allow you to monitor both short-term and long-term indoor air quality trends.
- **Informative Graphs:** For each unit of time (an hour or a day), the éCO2 displays a graph that represents the evolution of CO2. This graph presents the minimum, maximum and average value of all measurements taken during that period. This feature provides you with a detailed view of the variability of CO2 concentration over time.
- **Autonomy and Ease of Access:** The éCO2 is designed to be autonomous, which means that you can access historical data directly from the device, without the need for a smartphone or computer. Simply press button 3 on the top of the device to display the historical graphs. This simplicity of access allows you to remain independent and consult your data at any time.

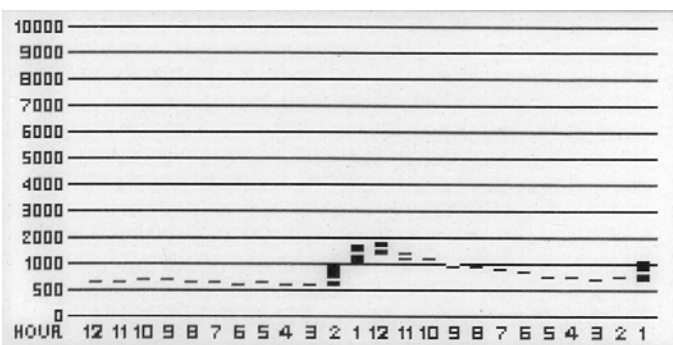
3.9.2. Accessing Historical Graphs

Accessing historical graphs of CO2 values on the éCO2 is simple and quick.

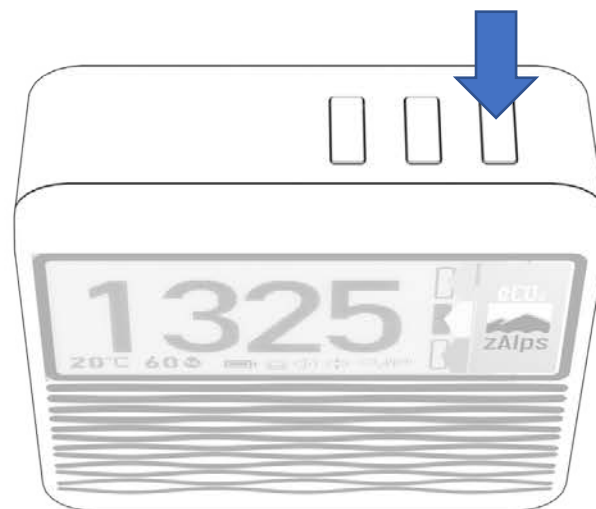
Press **button 3 once** located on the top of the device.



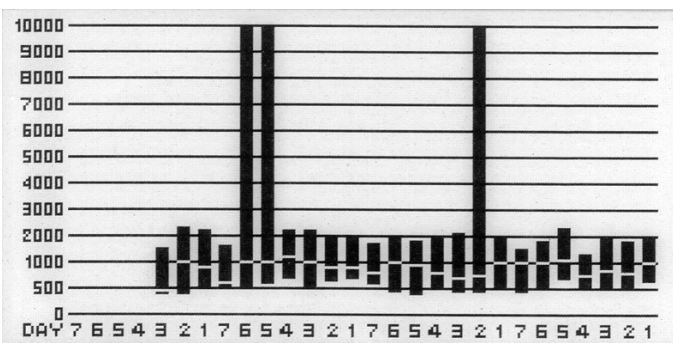
The screen displays the first graph, which represents the evolution of CO2 concentration over 24 hours. This graph gives you an overview of the CO2 variations throughout the day.



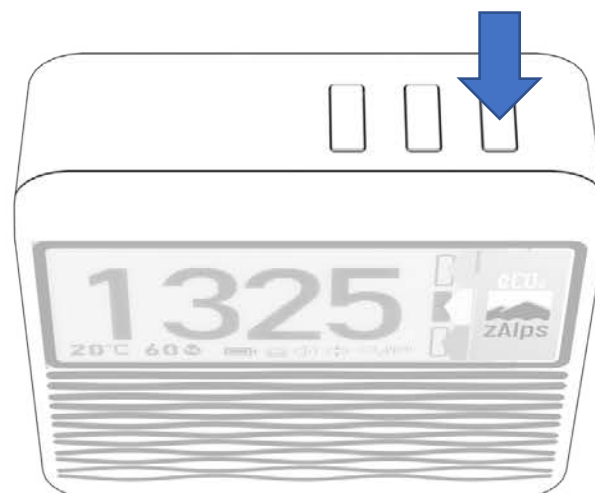
Press button 3 located on the top of the device a second time.



The screen then displays the second graph, which represents the evolution of CO2 concentration over 28 days. This graph gives you an overview of the CO2 variations over the last 4 weeks.



To return to the standard display of the éCO2, press button 3 again.

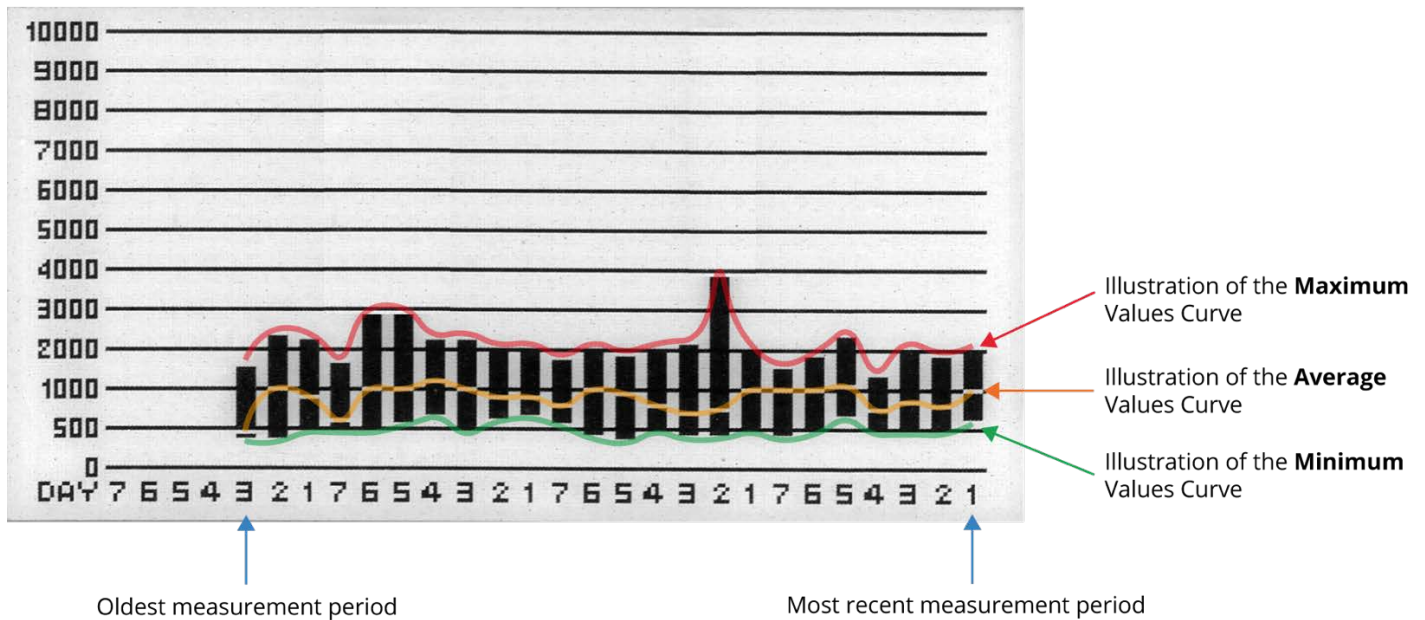
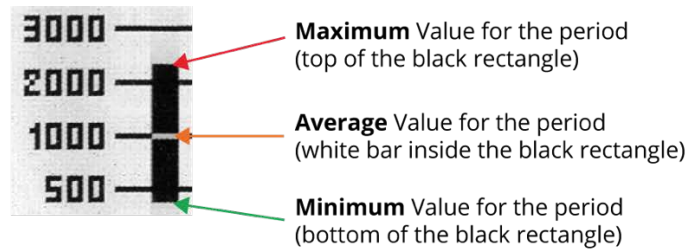


This feature allows you to easily access historical data and track the evolution of indoor air quality without complication.

3.9.3. Interpreting Historical Data

The historical data recorded by the éCO2 provides you with valuable insight into indoor air quality over time. To help you interpret this data, here is some essential information on how to read the éCO2's historical graphs:

- **Graph Axes:** The graph consists of two axes. The y-axis (vertical) represents the concentration of carbon dioxide (CO₂) in parts per million (ppm). It displays values ranging from 0 to 10,000 ppm. The x-axis (horizontal) represents time, with the most recent values on the right side of the graph and the oldest on the left. Each time interval represents either one hour (for the 24-hour graph) or one day (for the 28-day graph).
- **Minimum, Maximum and Average Values:** At each time interval (an hour or a day, depending on the selected display duration), the graph presents three key values: the minimum value, the maximum value and the average value of CO₂. This data gives you a comprehensive overview of the variation in CO₂ concentration during that period.
- **Graph Objective:** The main objective of the graph is not to determine the exact value of CO₂ at a specific moment, but rather to identify significant trends and variations. You can observe if CO₂ exceeds certain critical thresholds (for example, 1500 ppm or 2000 ppm) over a given time interval. This allows you to know when corrective measures, such as ventilating rooms, are necessary.
- **Display of Measurements:** You may notice that the scale of the y-axis (vertical axis) may seem wide, which can compress the representation of measurements when the CO₂ concentration is within normal ranges. However, this representation is designed to highlight threshold exceedances and significant variations rather than precise values.
- **Using the Graphs:** You can use these graphs to identify times when indoor air quality was not optimal, to assess the effectiveness of actions taken (such as ventilating rooms), and to track the evolution of CO₂ at different times of the day or week.

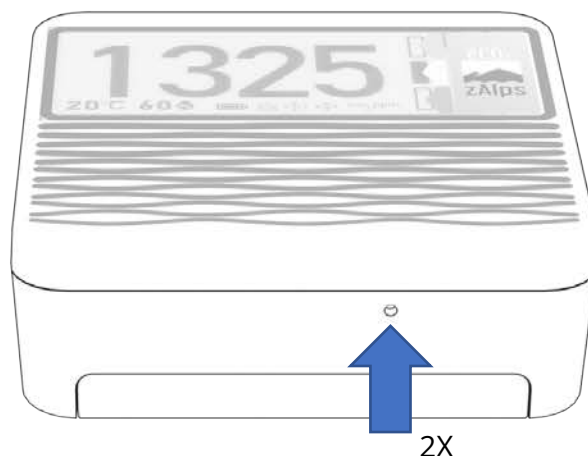


By using these graphs, you can make informed decisions to maintain better indoor air quality in your environment.

3.9.4. Erasing historical data

If you wish to erase the historical data recorded by your éCO2, you can do so by following the simple steps below:

1. Locate button 4 located under the éCO2 housing. You can access this button using the tool provided with your device.



2. Gently insert the tool into the hole provided for this purpose under the éCO2 housing.

3. Perform a brief double press (double-click) on button 4 using the tool.
4. When you double-press the button, the recorded historical data will be permanently erased.

Please note that this operation is irreversible and all historical data will be permanently lost.

3.10. Calibration

3.10.1. Importance of calibration

The éCO2 is equipped with a high-quality carbon dioxide (CO2) sensor that is factory calibrated. This means that when you first start up the device, it is not necessary to perform an initial calibration, as it is already configured to provide accurate measurements.

However, over time and depending on the conditions of use, it is possible that a slight drift may occur. This drift is a normal phenomenon that can affect the accuracy of CO2 measurements. It can be caused by various factors, including natural wear and tear of the sensor, exposure to extreme environmental conditions.

Although drift is generally limited over time for the high-end NDIR sensor of the éCO2, it is recommended to perform periodic calibration of the device to ensure continued accuracy of measurements. Calibration consists of adjusting the measurement values of the éCO2 to bring them back to known reference values, which allows for more accurate results.

Calibration of the éCO2 can be performed using reference gases or by following specific procedures provided below.

By ensuring that you perform periodic calibration of your éCO2, you can be confident that the measurements of CO2 concentration remain reliable and accurate, allowing you to make informed decisions to maintain indoor air quality in your environment.

3.10.2. Recommended Calibration Frequency

Periodic calibration of the éCO2 is essential to ensure the accuracy of carbon dioxide (CO2) concentration measurements. The recommended calibration frequency depends on several factors, including the conditions of use of the device.

In general, calibration once a year is sufficient for most users. This helps maintain measurement accuracy throughout the year. However, there are situations where it is advisable to increase the calibration frequency:

- **Polluted or Dusty Environments:** If you use the éCO2 in a particularly polluted, dusty or subject to atmospheric contaminants environment, it is recommended to perform calibration every two or three months. These conditions can influence measurement accuracy more quickly, hence the need for more frequent calibration.
- **Erroneous or Erratic Measurements:** If you notice inconsistent or unusual measurements of CO2 concentration, it may be necessary to calibrate the device. Erroneous measurements can result from sensor drift or other unforeseen factors.

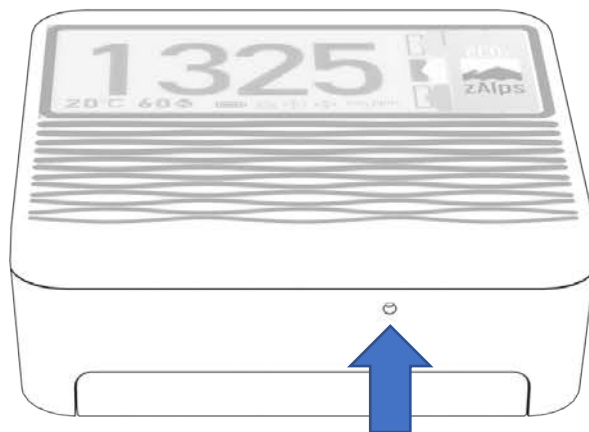
- **Suspicion of Measurement Offset:** If you have reason to believe that the CO₂ measurements do not correspond to the expected values or reference levels, calibration can help resolve the situation.

The calibration procedure for the éCO₂ is simple and well documented in the section below. By maintaining an appropriate calibration frequency based on your needs, you can be confident that your éCO₂ provides accurate data on indoor air quality, allowing you to take appropriate measures to maintain a healthy and safe environment.

3.10.3. Simple and Quick Calibration

Calibrating your éCO₂ is a simple procedure that allows you to ensure the accuracy of your CO₂ measurements. Here are the steps to follow to perform an effective calibration:

1. **Outdoor Placement:** To begin, place your éCO₂ outdoors. Leave it for 5 minutes like this, exposed to outdoor air.
2. **Triggering the Procedure:** To start the calibration procedure, leave the éCO₂ outdoors and press and hold button 4 located under the éCO₂ housing for four seconds using the tool provided. You will see the message 'Calibration in progress' displayed.



3. **Calibration in Progress:** Continue to leave your éCO₂ outdoors until the message 'Calibration in progress' disappears. The calibration procedure is underway.
4. **Calibration Complete:** Once the message has disappeared, it means that your éCO₂ has been successfully calibrated. It is now ready to provide accurate measurements of CO₂ concentration. You can use it in your indoor spaces.

During this calibration procedure, be sure to follow these recommendations:

- **Outdoor Environment:** Avoid performing calibration near sources of CO₂, such as fires or combustion, road traffic, animals, or people.
- **Weather Conditions:** Avoid calibration in very cold weather or when the air is extremely humid or polluted. Keep in mind that calibration should never be performed in the rain or in extreme weather conditions.
- **Handling:** Do not hold the éCO₂ in your hand during the calibration procedure, and avoid staying in close proximity to the device.

- **Cancellation of Previous Calibration:** Keep in mind that the current calibration procedure overrides and replaces any previous calibration. It is not possible to go back and restore previous calibration settings.
- **Calibration Locations:** Try to avoid performing calibration in highly urbanized areas with heavy road traffic, where the CO₂ concentration may be slightly higher than 420 ppm, or in dense forest areas or surrounded by vegetation, where the CO₂ concentration may be slightly lower than 420 ppm. However, these minor variations will have only a minimal impact on the accuracy of your measurements.

Following these recommendations will allow you to obtain accurate and reliable CO₂ measurements with your éCO₂, ensuring effective monitoring of indoor air quality.

3.11. Replacing the Batteries

The time will come when you will need to replace the batteries in your éCO₂ to ensure continuous and accurate operation of the device. You will know it is time to replace the batteries when the battery icon is empty or nearly empty on the screen.

Refer to section 3.1.3 Battery Installation for more information on the procedure.

Here are some recommendations to guide you through the battery replacement process:

- **Use High-Quality Batteries:** When purchasing new batteries, opt for high-quality batteries from reputable brands. This will ensure stable power supply and extend the life of your éCO₂.
- **Use AA / LR6 Type Batteries:** Make sure to use AA / LR6 type batteries. Failure to follow this recommendation may result in device malfunction.
- **Replace All Batteries at the Same Time:** It is best to replace them all at the same time. This will ensure uniform power supply.
- **Recycle Used Batteries:** Once you have removed the used batteries from your éCO₂, be sure to recycle them properly. Check for used battery collection points in your area or look for local recycling programs to dispose of your used batteries responsibly.
- **Store Spare Batteries:** It may be wise to keep a set of spare batteries on hand, especially if you use your éCO₂ frequently. This will save you any inconvenience in case of low battery.

Replacing the batteries is a simple procedure, but it is essential to follow these recommendations to ensure reliable operation of your éCO₂. By ensuring that the device is always properly powered, you will be able to continue monitoring indoor air quality effectively and accurately.

3.12. Maintenance and Precautions for Use

Maintaining your éCO₂ is essential to ensure its proper functioning and extend its lifespan. Here are some important recommendations to follow:

- **Cleaning the éCO₂:** You can clean your éCO₂ using a soft cloth slightly dampened with water and a little isopropyl alcohol. Avoid using abrasive or corrosive chemical products, as they

could damage the device. Make sure the éCO2 is completely dry before putting it back into service.

- **Protection against liquids:** Do not let the éCO2 come into contact with liquids, and do not use it near a sink or in damp places. Avoid spilling food or drinks on the device, and do not place objects containing liquids, such as vases, on or near the éCO2.
- **Avoid extreme heat and cold:** Do not subject your éCO2 to extremely high or low temperatures. Do not install it near heat sources such as radiators, stoves, or space heaters. Use the device in a location where temperatures remain within the recommended operating range.
- **Protection against moisture and steam:** Avoid exposing your éCO2 to humid environments or steam. Do not place the device in areas subject to water infiltration or water damage.
- **Power supply:** Your éCO2 does not have an On/Off button. If you want to cut off the power to the device, remove the batteries. Do not attempt to dry the éCO2 using an external heat source, such as a microwave or hair dryer.
- **Customer service:** If your éCO2 requires repairs or troubleshooting, please contact zAlps customer service for professional assistance. Do not attempt to disassemble or repair the device yourself, as this may void the warranty and cause additional damage.
- **Avoid blowing on the éCO2:** It is recommended not to blow on the éCO2, as exhaled air contains a high concentration of carbon dioxide (CO2) as well as significant humidity. Blowing on the device can cause temporary fluctuations in CO2 concentration measurements, which can skew the data for a few minutes.

By following these precautions and performing proper maintenance, you can ensure that your éCO2 will function reliably and accurately to monitor indoor air quality and ensure your comfort and well-being.

4. Specifications

Temperature + Humidity Sensor Sensirion SHT30 (Swiss) high precision CMOSens® technology

Carbon Dioxide Sensor Senseair CO2 Sunlight (Swedish) high precision NDIR type, with very low power consumption

Temperature Measurement Performance Measurement range 0-50°C / Resolution 0.1°C / Accuracy $\pm 0.3^\circ\text{C}$

Humidity Measurement Performance Measurement range 0-85% / Resolution 1% / Accuracy $\pm 3\%$

CO2 Measurement Performance Measurement range 0-9999ppm

Resolution 1ppm

Accuracy $\pm 3\%$ up to 5000ppm, 10% beyond 5000ppm

Power Supply 2 AA batteries (included)

Battery Life 4 years (Alkaline Batteries, Measurement frequency set to 10 minutes, Sound and visual alerts disabled, Connection to the connected socket disabled) / 8 months (Measurement frequency set to 1 minute, alerts and connected socket enabled)

Weight 110 g (with batteries), 65g (without batteries)

Dimensions 71 x 71 x 24.2 mm

Display Low power consumption electronic ink screen Useful dimensions 50 x 25 mm

Measurement Frequencies Measurement intervals: 1, 2, 5, 10 minutes

CO2 Measurement History Historical CO2 measurement data is stored and can be viewed over 24 hours and 28 days

Alerts and Notifications Sound and Visual Alerts, can be disabled

Certifications and Compliance CE-European Certification, RoHS Directive on hazardous substances.

Package Contents 1x calibrated éCO2 + 2x AA batteries + 1x Quick Start Guide + 1x Warranty + Registration Card + 1x Calibration Tool

Optional 220 V / 10 A connected socket (Available separately, Not delivered with the standard pack)

5. Additional Information

5.1. Blog and Website

We are pleased to inform you that you can access our website and explore our blog for additional information on indoor air quality, as well as helpful tips for improving your indoor environment. Our website, located at <https://zalps.fr>, is full of valuable resources to help you understand the importance of air quality and take steps to maintain healthy air in your home or office.

On our dedicated resources page, accessible via the link <https://zalps.fr/ressources/>, you will find a variety of informative articles covering various topics related to indoor air quality, including:

- The Dangers of Indoor Air Pollution: Learn about common pollutants that can affect air quality in our homes and the associated adverse health effects.
- Tips for Improving Air Quality: Learn practical tips for reducing indoor air pollution and creating a healthier environment.
- The Importance of Ventilation: Understand why adequate ventilation is essential for maintaining fresh and pure air.
- Using the éCO2: Get tips on how to best use your éCO2 to monitor indoor air quality.
- Latest News: Stay informed about the latest developments in air quality and health and environmental trends.
- Additional Resources: Find links to other websites, practical guides, and much more to deepen your knowledge.

We encourage you to visit our website regularly to stay informed of the latest information and practical advice for improving air quality in your environment. We are committed to providing you with the resources you need to help you make informed decisions about your health and well-being.

Feel free to explore our blog and share this information with your loved ones to create a healthier environment for everyone.

5.2. Compliance

The compliance of the éCO2 with CE (European Conformity) and ROHS (Restriction of Hazardous Substances) standards is a guarantee of quality and safety for users. The device has undergone rigorous testing to ensure that it meets current standards and regulations.

The undersigned, zAlps, declares that the éCO2 type equipment complies with the following CE directives and standards:

- EN IEC 55014-1:2021 - Electromagnetic compatibility - Part 1: General requirements
- EN IEC 55014-2:2021 - Electromagnetic compatibility - Part 2: Particular requirements for household appliances, electric tools and similar apparatus
- IEC 61000-3-2:2019/A1:2021 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic currents (household and professional equipment)
- 61000-3-3:2013/A2:2021 - Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limits of voltage variations, voltage fluctuations and flicker in public networks for equipment with an input current

greater than 16 A per phase The éCO2 also complies with the ROHS directive, which aims to limit the use of hazardous substances in electronic equipment.

The following IEC standards have been met to ensure this compliance:

- IEC 62321-1:2013 - Determination of hazardous substances in electrical and electronic equipment - Part 1: Overview and structure
- IEC 62321-2:2021 - Determination of hazardous substances in electrical and electronic equipment - Part 2: Test methods
- IEC 62321-3-1:2013 - Determination of hazardous substances in electrical and electronic equipment - Part 3-1: Test method for the determination of lead (Pb), cadmium (Cd), mercury (Hg) levels in components, materials and finished products
- IEC 62321-5:2013 - Determination of hazardous substances in electrical and electronic equipment - Part 5: Test method for the determination of bromine (Br) levels in components, materials and finished products
- IEC 62321-4:2013+AMD1:2017 CSV - Determination of hazardous substances in electrical and electronic equipment - Part 4: Test method for the determination of polychlorinated biphenyls (PCB) and polychlorinated terphenyls (PCT) levels in components, materials and finished products
- IEC 62321-6:2015 - Determination of hazardous substances in electrical and electronic equipment - Part 6: Test method for the determination of phthalate levels in components, materials and finished products
- IEC 62321-7-1:2015 - Determination of hazardous substances in electrical and electronic equipment - Part 7-1: Test method for the determination of lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr (VI)), bromine (Br), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) levels in materials and finished products
- IEC 62321-7-2:2017 - Determination of hazardous substances in electrical and electronic equipment - Part 7-2: Test method for the determination of phthalate levels in materials and finished products
- 62321-8:2017 - Determination of hazardous substances in electrical and electronic equipment - Part 8: Test method for the determination of diethylhexyl phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP) levels in materials and finished products

These certifications attest to the compliance of the éCO2 with safety and environmental standards, thus guaranteeing its reliability and compliance with current regulations.

For more information on zAlps products, please visit zalps.fr, contact customer service or write to serviceclient@zalps.fr.
Product specifications are subject to change without notice.