"Always aware of
the indoor climate"

Manual

EnviSense CO$_2$ Monitor

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Contents EN

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EnviSense CO$_2$ Monitor

With the EnviSense CO2 meter, you can always be sure of healthy indoor air. In addition to CO2, it also measures relative humidity (RH) and temperature. Including log function of all previously measured values!

Package contents

- Monitor
- USB cable for power supply
- EU adaptor
- Quick start leaflet

Features at a glance

- CO2/RH/temperature monitor
- Coloured LED indicators CO2 level (green, orange, red)
- Adjustable alarm
- Chart with variable time zoom levels
- Logs all historical data - viewable on digital dashboard and exportable to Excel
- Large screen
- Bevelled design so easy to read
- Touch button operation
- Automatic and manual calibration
- High-quality NDIR sensor
- Date and time display

Please note!

The buttons do not have to be pressed, the monitor already responds when you place your finger on the button. If you press the buttons too hard, the device will not function properly.

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Overview

Drawing sketch and parts list.
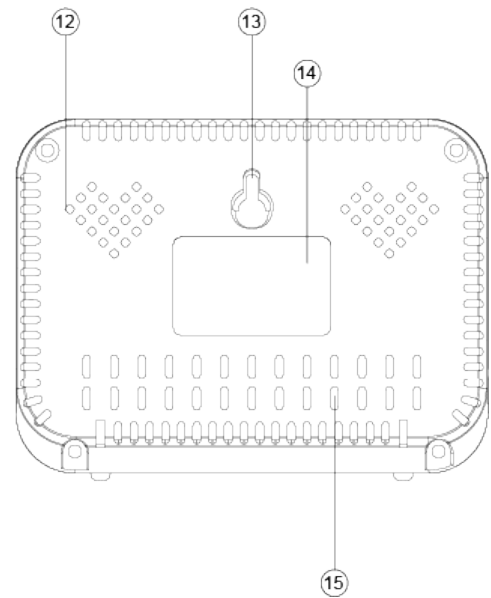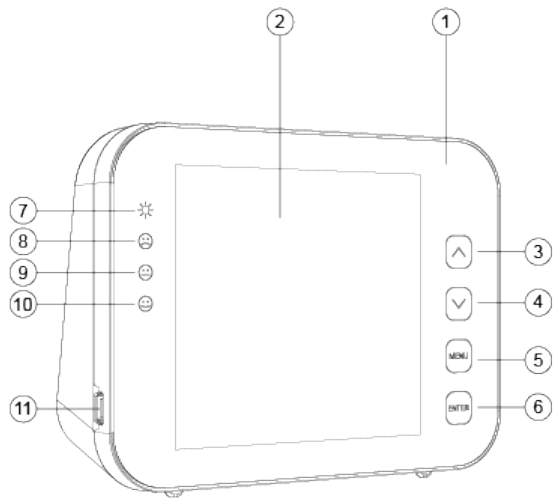
1. Front panel
2. LCD display
3. Button ▲
4. Button ▼
5. Button MENU
6. Button ENTER
7. LED power indicator
8. LED indicator red (CO_2 level high)
9. LED indicator orange (CO_2 level middle)
10. LED indicator green (CO_2 level low)
11. USB port
12. Hole for buzzer
13. Hole for screw
14. Label
15. Hole for sensors

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General operation and settings

- Use the supplied USB cable to connect the device. The monitor counts down 30 seconds. Once this has been completed, the device is ready to use. See details at the bottom of this page.

- Use the ▲ button to switch between RH/CO2/TEMP in the graph.

- Use the ▼ button to switch between time lines in the graph (70 min. with interval 5 min. or 14 h. with interval 1 h).

- Press MENU to enter the main menu. Use the arrows to navigate between the functions and press ENTER to select a function.

- Select 🔔 and press enter to turn the alarm on or off.

- Select to change the traffic light values, see p. 7.

- Select to manually change RH or TEMP or calibrate CO2, see p. 7.

- Select to view the historical data, for further explanation see p. 8.

- Select 🕐 to change the date and time. Tap ENTER if the entered value is correct. Use the arrows to adjust the value.

- To restore the factory settings, press and hold ENTER for 3 seconds until you hear a beep.

Tip!

Double-click ENTER for permanent display on.


Operating instructions

1. Connect the device with the supplied USB cable as shown on the right.

2. As soon as the device is connected, the LED lights will flash one after the other.

3. The display will count down from 30 to 0. Once the countdown is complete, your EnviSense is ready for use. No initial setup or calibration is required.

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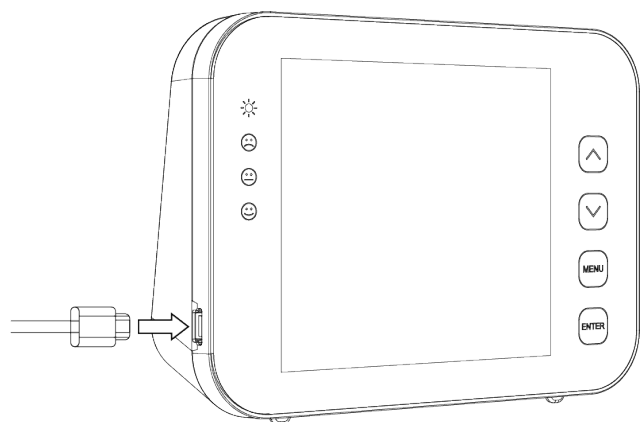
Proper CO2 meter location

Place the CO2 meter at table height in a place where it is not directly breathed in, at least 1.5 metres from an open window or door, or hang it on the wall. The device is suitable for a room up to ± 100 m2. When the sensor is switched on for the first time, it will need some time to calibrate itself properly.

LCD display
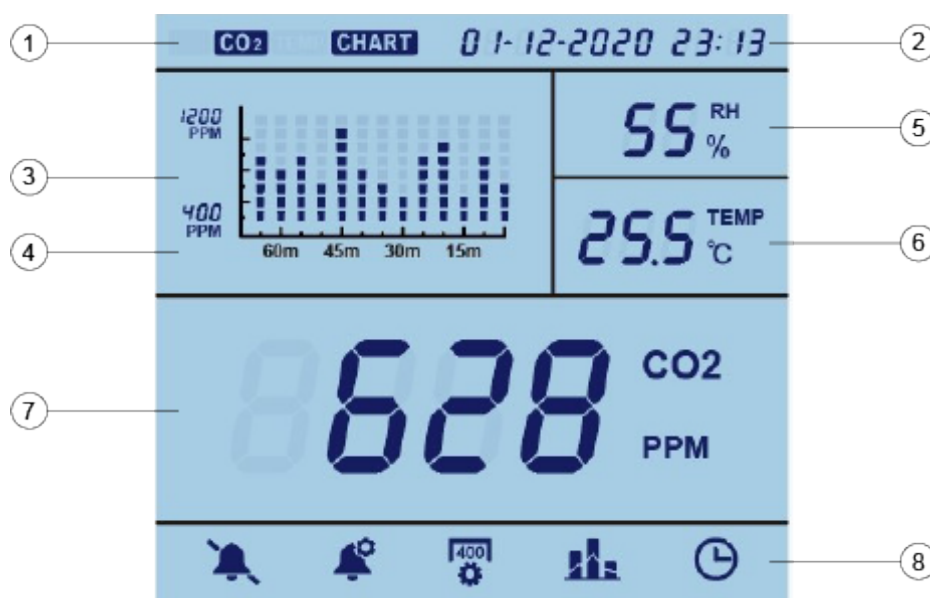
1.	RH/CO2/TEMP	5.	RH-value in %
2.	Date and time	6.	Temperature value in °C
3.	RH/CO2/TEMP graph	7.	CO2 value in ppm
4.	Time span of the chart	8.	Main menu

Tip!

Tap ENTER twice so that the screen remains permanently lit.

The main menu

Press MENU to enter the main menu. Use the arrows to navigate between the functions, the current selection will blink. Press ENTER to select a function. If nothing is pressed for 1 minute, the main menu will disappear and the unit will return to normal state. The different functions are explained below.

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Alarm

With this function, you can turn the alarm on or off.

🔕 press ENTER → 🔔 press ENTER → 🔕

<div style="background:#29ABE2">

Tip!

Once the alarm sounds, tap ENTER for mute.

</div>

Setting the traffic lights

Select this function to change the values at which the orange (LO) or red (HI) light illuminates.
This can be done as follows:

Select 🔔 and use the arrows for LOW or HIGH. Press ENTER and use the arrows to change the value.
Press ENTER to confirm.

800 LO   1200 HI

Calibrate

This function allows you to manually change RH or TEMP or calibrate CO2.

For RH or TEMP:

Select ⚙️ and use the arrows for RH or TEMP. Press ENTER for 3 sec. until you hear the beep.
Change the value with the arrows. Press ENTER again for 3 seconds until you hear the beep to confirm.

For CO2:

Select ⚙️ and use the arrows for CO2. Press ENTER for 3 sec. until you hear the beep. The EnviSense will now recalibrate.

Before calibration, place the EnviSense in an open window or outdoor environment with a portable battery source for at least 20 minutes to acclimate to an atmosphere of ±400 ppm CO2. Wait for the CO2 value to stabilize and then follow the above steps to calibrate. After calibration, leave the unit for 10 minutes before resuming normal operation.

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Data logger

Select ⏹ to view the graph on the monitor. When selected, the graph will display the last full hour (see time on the top right). Press ▲ to switch between RH/CO2/TEMP.

The EnviSense CO2 monitor also stores all previously measured values internally. You can connect the monitor to your computer. The monitor can be connected to your computer with the supplied USB cable. The folder "ENVISENSE" will open automatically on your computer. This ENVISENSE folder contains a .csv file that can be uploaded to www.dashboard.envisense.net.

Step 1. Go to www.dashboard.envisense.net.
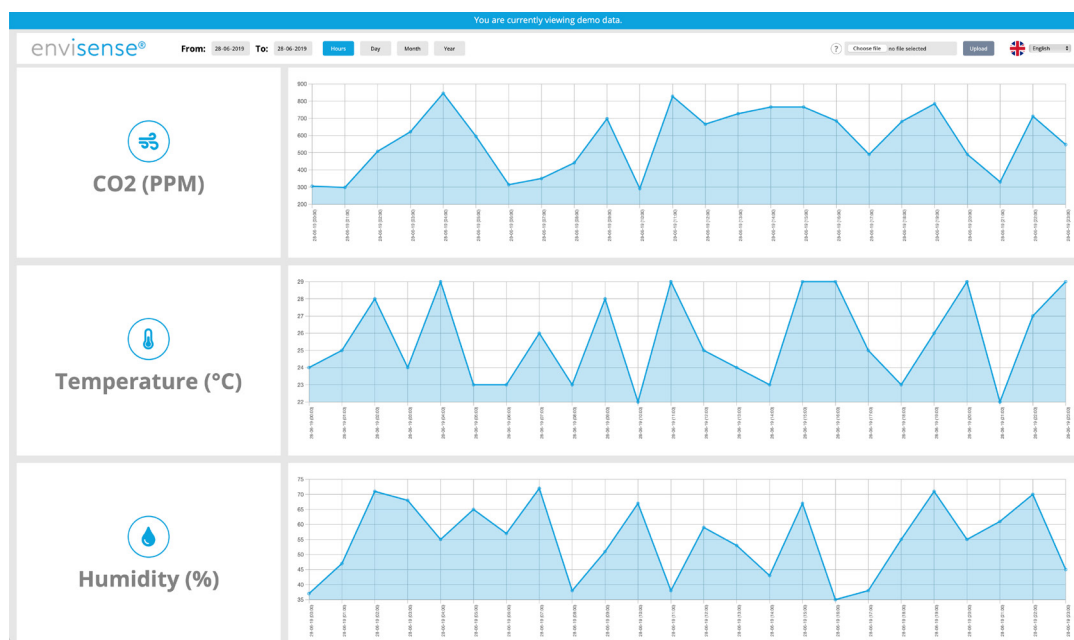
Here you see a dashboard. When you open the page for the first time, the dashboard is filled with demo data. Note: This is not your own data yet.

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Step 2. Upload the desired .csv file into the dashboard.
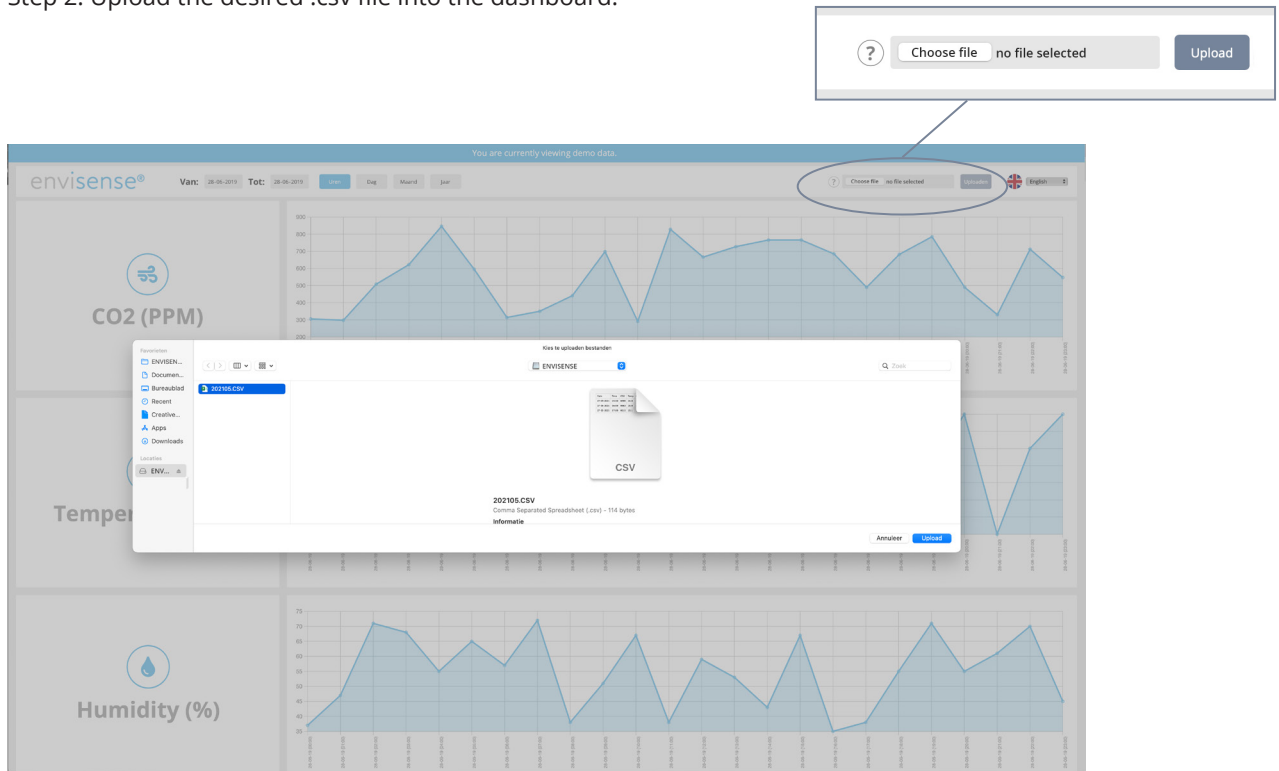
To upload a .csv file, click "Choose file" in the upper right corner. Go to the folder where you saved the .csv file. Select the file and then click the "Upload" button to place the selected file in the dashboard.

Step 3. Overview of historical data

After uploading the file you will see 3 tables containing your historical data of CO2, temperature and humidity. In the top left corner you can indicate whether you wish to view the data in hours, days, months or years.
In addition, you can select specific dates in the top left-hand corner.

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Date and time

Select ⏲ to change the date and time. The selected value will blink. If this value is correct, you can tap ENTER to change the next value. You can adjust the value with ▲ and ▼ . Tap ENTER to confirm. If not, the value will jump back after 30 seconds.

Please note!

If you unplug the EnviSense, it will remember the set date and time for approximately 3 to 7 days. You may therefore need to set this again if the monitor has been switched off. If you do not set this correctly, it will go wrong in the Excel file.

Specifications

Typical test conditions: Ambient Temp: 23 ± 3°C, RH=50%~70%, Altitude= 0~10 meters

Measurement	Specifications
Operating Temperature	0°C - 50°C
Storage Temperature	-20°C - 60°C
Operating & storage RH	0-95% (non-condensing)
Suitable for a room	up to ± 100 m²

CO2 Measurement	
Measuringe range	(0-5000)ppm
Display resolution	1 ppm (0-1000); 5ppm (1000-2000); 10ppm (>2000)
Accuracy	(0~3000)ppm ± 50ppm ±5% of reading (take the Maximum)
	(>3000)ppm: ±7% of reading
Repeatability	20ppm at 400ppm
Temp compensation	±0,1% of reading per °C
Response time	<2 min for 63% of sep chance <4,6 min for 90% step change
Warm-up time	<20 seconds

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Temperature Measurement	
Operating temperature	0°C ~ 90°C
Display resolution	0.1°C
Response time	<20 minutes (63%)
RH Measurement	
Measuring range	5~95%
Accuracy	±5%
Display resolution	1% Main interface display, 0.1 % Max/Min display
Operating Voltage	DC (5±0.25)V
Dimension	120*90*35mm
Weight	170g (6.0oz) device only, not including AC adapter

EnviSense CO2 value-chart

Effects   PPM

☹	Dangerous on prolonged exposure	5000
☹	Negative health effects	2000
☹	Ventilation necessary	1200
😐	Ventilation desirable	1000
🙂	Accepted level	800
😃	Healthy indoor climate	600
😃	Healthy outside air level	350

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