MIKROTIK

# CLAIRÉ

Connected indoor environment monitoring – the MikroTik way.

You can't see everything that's happening in your room. Meanwhile, $CO_2$ may be building up. Candles, 3D printers, dust or even cleaning products may be adding particles to the air. And to your lungs. CLAIRÉ lets you see what your senses miss – so you can start living a better, cleaner life.

## Automate and forget!

matter

BUILT ON THREAD

### Matter over Thread

Your home's data can stay at home. Build local smart-home automations with Home Assistant and hAP be$^3$ Media – without sending every reading to a server on the other side of the world.




## Detect and track!

### $CO_2$

Feeling tired or having trouble concentrating? Before blaming the workload, check the room. $CO_2$ can build up faster than you might expect.

### VOC

Perfume, paint, glue – or solvents in the workshop. Many products and processes release volatile compounds you can't reliably see or smell. CLAIRÉ will warn you.

### PM2.5 + PM10

Candles. Cooking. Dust. 3D printing. Cleaning. You may not see the particles in the air. CLAIRÉ can.

### Temperature + humidity

Keep comfort in check, spot unwanted humidity, and make smarter heating and ventilation decisions.

## The window is open. Is that enough? Turns out...

It's surprisingly difficult to judge ventilation by feel. Cracking a window can make a room feel fresher without telling you how much $CO_2$ remains. CLAIRÉ replaces the guesswork with a number. Open the window and watch it fall. Close it when you're satisfied.

Consider this: **you take around 20 000 breaths every day**. Better input, better output: deal with the air quality in your home, and pretty soon you might notice better sleep & focus, more energy – as your lungs finally get the fresh air you thought they were getting all along!

Check out our YouTube and TikTube videos for this product!

*No smart home required. The 2" colour display puts the readings right in front of you, with selectable views and colour-coded warnings when the air takes a turn.*




## Your 3D printer prints more than you asked for

Different printing materials and processes can affect particles and volatile compounds in the surrounding air. CLAIRÉ gives you PM and VOC measurements to help understand what's happening around your own setup.

## Just another day indoors...

07:30 / Window opened $CO_2$ ↓

08:10 / Making breakfast PM ↑

09:15 / 2h at the desk, window slightly opened $CO_2$ ↑↑

11:15 / Window opened properly $CO_2$ ↓↓↓

15:00 / 3D printer started PM / VOC ↑

18:30 / Dinner PM ↑↑

20:00 / Game night with friends $CO_2$ ↑↑↑

21:00 / Candles to set the mood PM / VOC ↑↑

● FRESH AIR/ GOOD

BRAIN FOG AREA/ TIME TO ACT ●

*Illustrative example. Different activities affect specific air-quality measurements in various ways.*

## Putting “Art” into “Smart Home”: elegant automation via Matter over Thread

Knowing when to open a window is useful enough. But CLAIRÉ is also a **Matter over Thread device**. Pair it with a compatible smart-home system and its measurements can become inputs for automations.

**$CO_2$ is getting high?** Turn up compatible ventilation.

**Air quality deteriorates rapidly?** Send a notification, for example, over the phone, e-mail, SMS, light or through custom sound signals in the affected rooms.

**Conditions return to normal?** Turn the ventilation back down – better your wallet and for the planet!

A short guide on automation + hAP be³ Media

With a maximum power consumption of less than 1 W, CLAIRÉ can easily run from a USB powerbank or MikroTik GPOE-USB – handy when you want to check the air somewhere without a convenient power outlet.







With a local setup such as **hAP be³ Media + Home Assistant**, there’s no need to send every measurement halfway around the world just to make something happen in the next room. **Keep your data, history and automations inside your own network** – without buying unnecessary IoT hubs and gadgets.

Sounds like a lot of setup? It doesn’t have to be. **WinBox 4 introduces simple one-click container setup** – choose Home Assistant, get it running on hAP be³ Media, and start building the home of your dreams!

## Specifications

| | |
|---|---|
| Product name | CLAIRÉ |
| Product code | IAQM-THC2PV-W - white enclosure, IAQM-THC2PV-G - grey enclosure |
| Carbon dioxide ($CO_2$) sensor | Sensirion SCD40-D-R2 photoacoustic spectroscopy (PAS) sensor |
| $CO_2$ range and accuracy | Range 400..2000 ppm Accuracy ±50.0 ppm ±5.0% |
| Particulate matter PM2.5 sensor | Range 0..1000 µm/$m^3$ Accuracy ±10% |
| Particulate matter PM10 sensor | Range 0..1000 µm/$m^3$ Accuracy ±25% |
| Temperature sensor | Range 0..+50°C |
| Relative humidity sensor | Range 0..100 %RH |
| VOC sensor | Range 1..500 VOC index points |
| Matter connection | Yes, Matter over Thread |
| Bluetooth® | Yes, for simple Matter provisioning (device setup) only |
| Display | Full-color 2" display with automatic brightness-adjusted backlight |
| Display modes | User adjustable various predefined display modes |
| Indications | Visual color-coded warnings for deteriorated or unhealthy air |
| Powering | USB Type-C socket or 5VDC terminal connector for LPS adapter |
| Dimensions | 76 x 76 x 24mm |
| Mounting | Desktop or wall-mounted bracket with a security screw option |
| Smart home systems compatible with Matter-over-Thread | Apple Home Pod, Apple TV 4K, Google Nest Hub, Nest Hub mini.<br>Also seamlessly integrates with Home Assistant app. |

## Powering

| | |
|---|---|
| Number of DC inputs | 2 |
| Max power consumption | 1 W |