**Air quality monitors gas**

**Ethera NEMo IAQ Monitor**

***Description:***

NEMo is the first portable logger of Indoor Air Quality (IAQ) to continuously and selectively measure confinement and formaldehyde with the levels stipulated for indoor air quality.

Design houses, building users, or public organizations can thus easily set up monitoring campaigns. A single button is all that is required to collect the data and generate complete, visual reports.

Continuous measurement of these parameters, along with new management and analysis software, allow accurate analysis of occupants’ exposure to pollutants and identification of pollution peaks. The manager can thus undertake highly effective and more economic corrective actions best suited to the type of building: optimization of ventilation, development of “best practices” (opening windows, cleaning schedules,… ).

### Strengths

* Most relevant parameters of IAQ in a single device
* Exclusive and ultra sensitive technology of nanoporous sensors
* Non Dispersive Infra Red (NDIR) measurement of CO2 in accordance with IAQ standards.
* Compact, robust, easy to use and install
* Possible extension to other gases
* Multi-parameter IAQ indicator
* Turnkey diagnosis mode

### A unique technology for sensitive and selective measurement of formaldehyde

NEMo incorporates an innovative and exclusive measurement technology developed by ETHERA\*. This technology is based on ultra-sensitive nanoporous materials and offers high performances comparable to conventional methods (i.e. gas chromatography).

The direct optical reading of sensors while they are exposed enables diagnosis of indoor air quality at concentrations in the order of µg/m3 (ppb).

\*under CEA/CNRS license

***Specification:***

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| --- |
| **CO2** |
| Detection method: | Non Dispersive Infrared spectrometry (NDIR)  |
| Measuring range: | 0 à 5000 ppm  |
| Accuracy: | 1 ppm  |
| Sensitivity: | +/- 50 ppm +/- 3 % reading value  |
| Response time 90%: | < 30 seconds  |
|   |   |
| **FORMALDEHYDE** |
| Detection method: | Optical reading with nanoporous material (patented technology)  |
| Measuring range: | 0-2000 ppb (0-2,5 mg/m3), according to exposure time  |
| Sensitivity: | Up to 1 ppb, according to exposure time  |
| Sampling method: | Diffusive  |
| Comparison with DNPH\* reference method: | < 25 %  |
| Storage conditions for the consumable: | Store between 2 and 8°C  |
|   |   |
| **TEMPERATURE** |
| Sensor type: | CMOS  |
| Measuring range: | -25°C to +55°C  |
| Accuracy: | 0,08°C  |
| Sensitivity: | +/- 2°C full range (+/- 1°C from 0°C to 55°C)  |
|   |   |
| **HUMIDITY** |
| Sensor type: | Capacitive  |
| Measuring range: | 0 to 95 % (+/- 3 % reading value)  |
| Accuracy: | 0,08 %  |
| Sensitivity: | +/- 5 % full range (+/- 3 % from 20°C to 55°C)  |
|   |   |
| **PRESSURE** |
| Sensor type: | CMOS  |
| Measuring range: | 300 to 1100 hPa  |
| Accuracy: | +/- 0,01 hPa  |
| Sensitivity: | +/- 1 hPa  |
|   |   |
| **GENERAL CHARACTERISTICS** |
| Sampling time: | 10 minutes (customizable)  |
| Operating Conditions: | Temperature between 0°C to +40°C.- Humidity between 20 et 80 % (RH)  |
| Embeded memory: | > 50 000 points  |
| Dimensions (L x Wx H) approx: | 175 x 95 x 75 mm  |
| Total weight: | 450 grams  |
| Power supply/Battery life: | Battery 5000 mA (up to 15 jours lifetime, with measurements every 10 minutes)  |
|   | A/C 220/110V and charge with microUSB port  |
|   | Start/Stop with magnet  |
| Display: | 3-color LED indicator, customizable with user mode  |
| Interface/Communication: | MicroUSB  |
|   | Radio Frequency - Multi-logger communication with concentrator (optional)  |
| System requirements: | Operating system : Windows 7 ou higher, Mac OS 10.9 or higher  |
| Guarantee: | 1-year guarantee for labor and parts  |
| Conformity: | Décret 2012-14 pour le confinement  |
| Contents: | 1 logger  |
|   | 1 USB adapter charger  |
|   | 1 USB-MicroUSB cable  |
|   | Quickstart guide  |
|   | USB flashkey with Profil’air Manager 2 software and manual  |
|   | 1 quality report  |
| Options: | Transport case  |
|   | Concentrator to connect several NEMo simultaneously  |
|   | Suspension kit  |
| Consumable: | Formaldehyde sensor (ref. NE-FOR01x)  |