BI-ARD

Indoor Air Quality Measurement Station

User manual

Michal Dobes

1. Controls

Once the device is connected to electricity, it immediately starts measuring data from its sensors at regular intervals.

During the first 3 minutes after the device is switched on, the readings stabilize, and the measured data should be accurate after this time.

1.1. Interface on the device



1.1.1. Display

The display shows the last measured data from the selected sensor. At the top of the display it shows which variable is selected and the measured value is displayed in the middle.

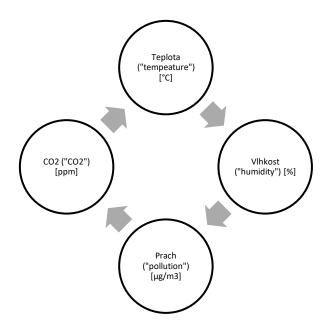
If the device is currently in the measurement phase, the text "measuring..." appears.

If the data from the sensor cannot be read (the sensor is broken, the device has not yet measured anything) the text "no data" appears.

1.1.2. Button

The button next to the display allows you to select the sensor from which the data will be displayed.

Switching between sensors is cyclical after one button press.



1.1.3. LED

Below the button is an LED that simply indicates the air quality.

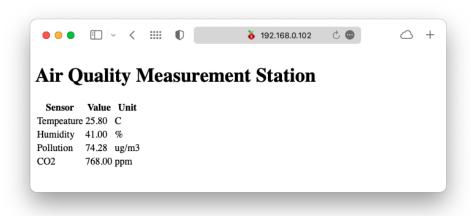
When the quality is good, it lights up blue, if any of the values exceed the given limit, it switches to red.

The limit values are 1000 ppm for CO2 [1] and 300 μ g/m3 [2]. Other values are ignored.

1.2. Web server

If the device is connected to the Internet with an Ethernet cable and has a configured IP address, it also functions as a web server. The simple web page generated by the device lists the measured values from all sensors.

To visit this page, simply enter the IP address of the device into the browser.



[1] https://automatizace.hw.cz/kvalita-vzduchu-v-uzavrenych-mistnostech-7-co2.html

[2] http://www.howmuchsnow.com/arduino/airquality/