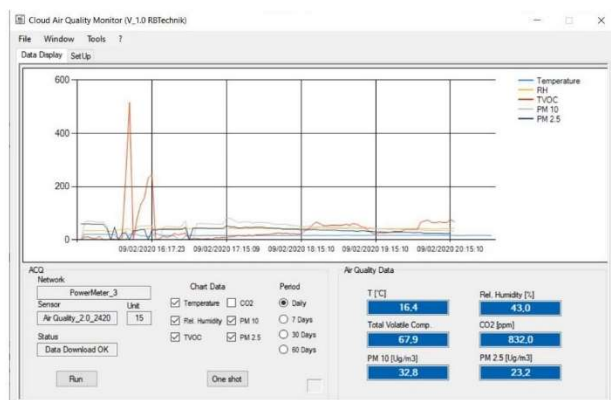


Cloud Air Quality



<div> <div>  Vodafone IT <div>12:48</div> </div> <div> <div>  <div> <div>Indietro</div> <div>Air Quality_3.0_2920</div> </div> </div> </div> </div>	
SENSORI	
Temperature	16.1 °C
Relat. Humidity	43.5 %
TVOC	4.9 -
CO2	441.0 ppm
PM 10	13.0 Ug/m3
PM 2.5	4.9 Ug/m3
INFORMAZIONI	
Nome	Air Quality_3.0_29...
Icona	Premi per impostare >
Marca	RB
Modello	Air Quality_3.0_2920 (?)

Preliminary



Features:

- Indoor Air Quality monitor compatible with Casambi ecosystem.
- Measure Ambient temperature, Relative Humidity, Pressure, IAQ (Index of Air Quality)
- Data are visible on Casambi App and stored in Casambi Cloud
- Cloud stored data can be retrieved with the included app that allow display, charting, analyzing of all parameters.
- No tools installation.
- Small dimensions allow to be easily installed and hidden.

Description

Cloud Air quality Station is a Casambi ready Air Quality sensor station that allow to measure, display, report and store Air Quality data .

The device has to be paired to a Casambi network and it is visible in Sensor section.

Acquired data are available on sensor page app and are stored in Casambi cloud.

The device need a reliable Internet connection and an active Casambi Gateway.

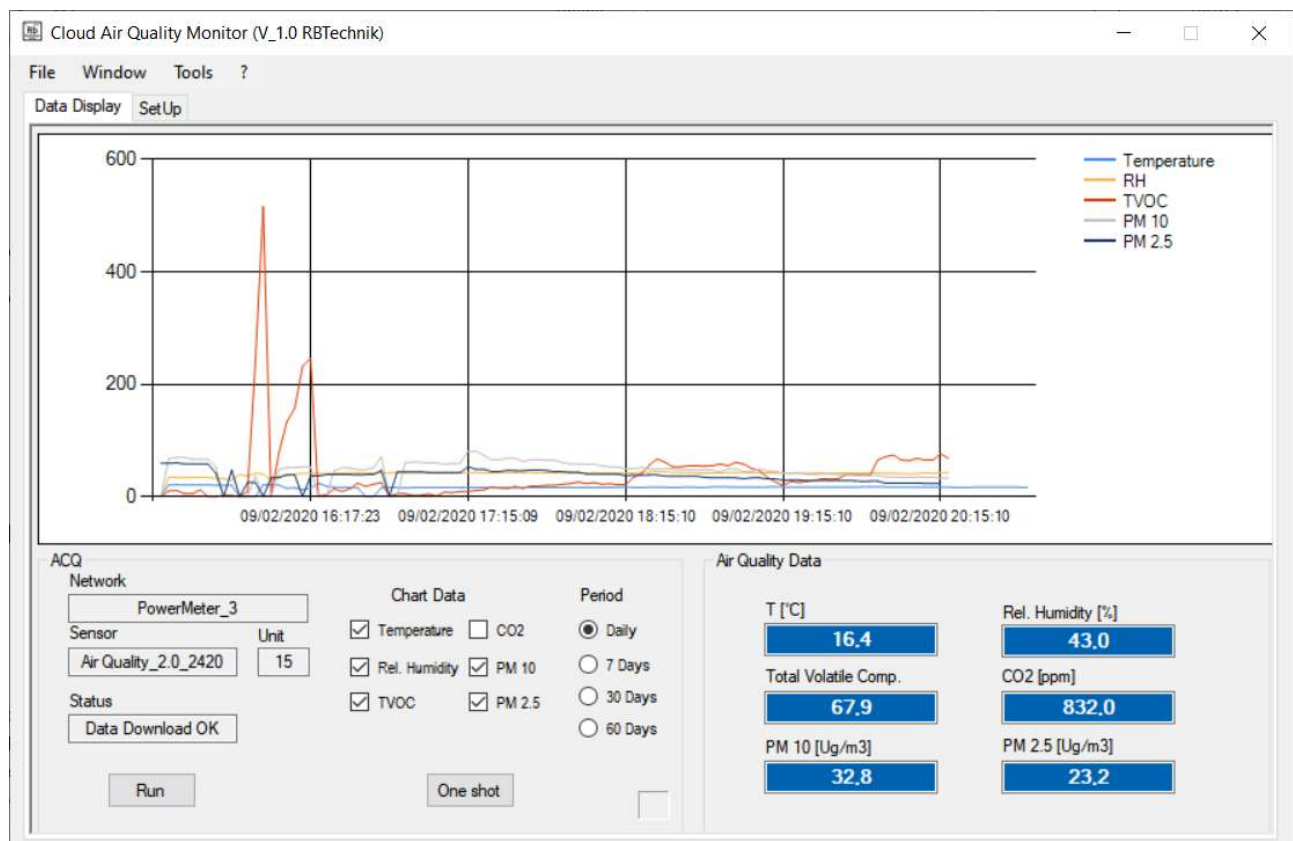


The screenshot shows the Casambi app interface on a mobile device. At the top, the status bar shows 'vodafone IT', signal strength, Wi-Fi, and the time '12:48'. The app header has a back arrow, the text 'Indietro', and the sensor name 'Air Quality_3.0_2920'. Below the header is a section titled 'SENSORI' containing a list of sensor readings: Temperature (16.1 °C), Relat. Humidity (43.5 %), TVOC (4.9 -), CO2 (441.0 ppm), PM 10 (13.0 Ug/m3), and PM 2.5 (4.9 Ug/m3). Below this is a section titled 'INFORMAZIONI' containing details about the sensor: Nome (Air Quality_3.0_29...), Icona (Premi per impostare >), Marca (RB), and Modello (Air Quality_3.0_2920) with a question mark icon next to it.

SENSORI	
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Modello	Air Quality_3.0_2920 ?

The included Windows App allow to establish a Cloud Casambi API Session to retrieve data from cloud to display, chart and report mains parameters and installation energy consumption.

Software is intuitive and all setup settings are automatically stored and retrieved on App closing and opening.



Technical specification:

Air quality measured parameters:

Ambient temperature -40 - 85 °C
Relative Humidity (rH) 0 - 100 %
Air Pressure 300 – 1100 hPA
Index of Air Quality 0 - 500

Power consumption: 0,5W


Isolation: class II

Protection grade IP 20

Dimensions: 50x50x30 mm (tentative)

Standards: Electromagnetic compatibility (EMC) - emissions and immunity: EN 62052-11

Electrical safety: EN 61010-1, EN 50470-1 (MID), UL 61010-1

Approvals: 

Not suitable for safety application.

Contact: info@RBTechnik.eu

IAQ Index	Air Quality	Impact (long-term exposure)	Suggested action
0 – 50	Excellent	Pure air; best for well-being	No measures needed
51 – 100	Good	No irritation or impact on well-being	No measures needed
101 – 150	Lightly polluted	Reduction of well-being possible	Ventilation suggested
151 – 200	Moderately polluted	More significant irritation possible	Increase ventilation with clean air
201 – 250 ³	Heavily polluted	Exposition might lead to effects like headache depending on type of VOCs	optimize ventilation
251 – 350	Severely polluted	More severe health issue possible if harmful VOC present	Contamination should be identified if level is reached even w/o presence of people; maximize ventilation & reduce attendance
> 351	Extremely polluted	Headaches, additional neurotoxic effects possible	Contamination needs to be identified; avoid presence in room and maximize ventilation

Installation

- 1) Caution! Electric shock hazard. Trained personnel are required for installation.
- 2) Connect Cloud Air Quality to mains.
- 3) Cloud Air Quality has to be in the radio range of at least one Casambi network other node.
- 4) Pair the device with the Casambi network active in the area.
- 5) An active Casambi network gateway is needed to delivery data to the cloud. Data will be available with some delay.
- 6) Our Cloud Air quality are designed for indoor use in public and domestic spaces (were normally the sensor will be exposed to "fresh" air at list once in 8 days (ambient unoccupied by humans))
In this way we can rely on the sensor auto-calibration built-in algorithm .
- 7) Requirements for auto-calibration:
At list weekly exposure to fresh air
Device Continuously powered
- 8) The sensor must be exposed to typical background CO2 levels (around 400-450ppm) at least once during the auto-calibration period. The built in autocalibration function in sensors uses the information gathered at these periods to recalibrate the zero point. A typical example would be in office buildings, which are often unoccupied overnight and at weekends. During these 'out of hours' times, background CO2 levels tend to drop very low. This is why an auto-calibration cycle is typically at least 8 days, to include a weekend. For auto-calibration to function, the sensor must be continuously powered for the entire auto-calibration period. This is because when the sensor is switched off, autocalibration information is deleted (to ensure that each installation is unaffected by previous data history).
- 9) In alternative it is always possible to start calibration using specific command from Casambi app (using fresh air too)