

# Environmental Meter PCE-AQD 50



**Environmental meter with a battery life of up to 10 months / E-paper display / Easy operation /  
Data memory for 1 trillion measuring points / Measuring range up to 40,000 ppm CO<sub>2</sub> /  
Temperature, humidity, atmospheric pressure, CO<sub>2</sub>**

The environmental meter is specially designed for long-term monitoring of climatic conditions in, for example, offices, classrooms or lecture halls. The air quality meter has various sensors. Among other things, the air quality meter has a carbon dioxide sensor up to 40,000 ppm, a temperature sensor with a measuring range between 0 ... 50 °C, an ambient humidity sensor with a measuring range between 0 ... 100% RH and a barometer with a measuring range between 300 ... 2000 hPa. The air quality meter can therefore be used in many applications due to its large number of sensors. The measured values are shown directly on the e-paper display of the air quality measuring device. A good / medium / bad rating of the carbon dioxide content in the ambient air is also displayed.

During the measurement, the environmental meter can automatically record the measured values. The measured values are saved as .csv on the micro SD card. This means that the measurement data recorded by the air quality meter can be imported directly into the company's own database. The measurement data from the air quality measuring device can be displayed in graphical and tabular form via the software.

The environmental meter has an alarm function. This alarm mode can be used to set limit values for the individual sensors. As soon as the set threshold value is reached in the air quality meter, this is indicated acoustically and visually via the alarm LED. After the air quality meter falls below the threshold value again, the alarm switches off again automatically.

The measured values are displayed numerically on the 2.7" display of the environmental meter. For a better analysis of the last measured values, the display can be switched to a histogram display. The energy-saving e-paper display enables a long battery life for the air quality meter. Depending on the setting the battery can operate the air quality meter for about 10 months before it has to be recharged. In addition to the possible power supply via the built-in battery, the air quality measuring device can also be operated continuously via the 12 V DC power supply unit.

- ▶ Battery life of up to 10 months
- ▶ Measuring range up to 40,000 ppm CO<sub>2</sub>
- ▶ 32 GB data storage
- ▶ Temperature and humidity sensor
- ▶ .csv file format
- ▶ E-paper display with histogram display
- ▶ Display of atmospheric pressure
- ▶ Good / medium / bad rating
- ▶ Alarm limits
- ▶ Carbon dioxide and absolute pressure sensor

Subject to change

# Specifications

## Temperature

|                 |   |
|-----------------|---|
| Measuring range | 0 ... +50 °C / 32 ... 122 °F  |
| Resolution      | 0.1 °C  |
| Accuracy        | ±0.15 °C @ 0 ... 20 °C / 32 ... 60 °F<br>±0.1 °C @ 20 ... 50 °C / 68 ... 122 °F |

## Ambient Humidity

|                 |  |
|-----------------|--|
| Measuring range | 0 ... 100 % RH   |
| Resolution      | 0.1 % RH   |
| Accuracy        | ±1.5 % RH @ 0 ... 80 % RH<br>±2 % RH @ 80 ... 100 % RH |

## Atmospheric

### Pressure

|                 |   |
|-----------------|---|
| Measuring range | 300 ... 2000 hPa  |
| Resolution      | 0.1 hPa   |
| Accuracy        | ±2 hPa @ 25 °C / 77 °F and 750 ... 1100 hPa<br>±4 hPa @ 0 ... +50 °C / 32 ... 122 °F and 300 ... 1200 hPa |

### CO2

|                       |   |
|-----------------------|---|
| Measuring range       | 0 ... 40000 ppm   |
| Resolution            | 1 ppm   |
| Accuracy              | ±(30 ppm + 3% of measured value)<br>@ 400 ... 10000 ppm @25 °C / 77 °F<br>±(6 ... 10 % of measured value)<br>@ 0 ... 400 ppm or 10000 ... 40000 ppm |
| Temperature Stability | 2.5 ppm/°C @ T = 0 ... 50 °C / 32 ... 122 °F, 400 ... 10000 ppm   |

### Further

### Specifications

|               |  |
|---------------|--|
| Display       | 2.7" E-Paper   |
| Battery life* | ca. 10 months for the measurement intervals:<br>Temperature: 60 minutes<br>Ambient humidity: 60 minutes<br>Atmospheric pressure: 60 minutes<br>CO2: 60 minutes |

\*further information on battery life can be found in the instructions

|                      |   |
|----------------------|---|
| Storage capacity     | MicroSD card with 32 GB of storage for a total of 1 trillion measuring points |
| Sampling intervals   | 30s, 1 min, 2 min, 10 min, 15 min, 30 min, 1 h, 2 h, 6 h, 12 h, 24 h          |
| Power supply         | battery 7.4 V DC / 3400 mAh, Li-Ion battery                                   |
| Power supply         | mains power adapter 12 V DC / 1.5 A   |
| Protection class     | IP30  |
| Operating conditions | 0 ... +50 °C / 32 ... 122 °F<br>0 ... 100 % RH, non-condensing                |
| Storage conditions   | -20 ... +60 °C / -4 ... 140 °F<br>0 ... 100 % RH, non-condensing              |
| Dimensions           | 128.5 x 88.5 x 41 mm / 1.1 x 3.4 x 1.6"                                       |
| Weight               | 300 g / 10.5 oz   |

# More information

## More product info



## Similar products



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