

# AIR QUALITY MONITORING ENVIRONMENTAL METER

## PCE-AQD 50

### Temperature, humidity, atmospheric pressure, CO<sub>2</sub> / measurement range up to 40,000 ppm

The environmental meter is specially designed for long-term monitoring of climatic conditions in, for example, offices, classrooms or lecture halls. 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.

### ISO cal option

- » 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



## APPLICATION



## TECHNICAL SPECIFICATIONS

### Temperature

Measuring range 0 ... +50 °C / 32 ... 122 °F  
Resolution 0.1 °C  
Accuracy ±0.15 °C @ 0 ... 20 °C / 32 ... 60 °F  
±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  
±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  
±4 hPa @ 0 ... +50 °C / 32 ... 122 °F  
and 300 ... 1200 hPa

### CO<sub>2</sub>

Measuring range 0 ... 40000 ppm  
Resolution 1 ppm  
Accuracy ±(30 ppm + 3% of measured value)  
@ 400 ... 10000 ppm @25 °C / 77 °F  
±(6 ... 10 % of measured value)  
@ 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:  
Temperature: 60 minutes  
Ambient humidity: 60 minutes  
Atmospheric pressure: 60 minutes  
CO<sub>2</sub>: 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  
0 ... 100 % RH, non-condensing  
Storage conditions -20 ... +60 °C / -4 ... 140 °F  
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



Subject to change without notice