

ENVIRONMENTAL METER PCE-AQD 50

Temperature, humidity, atmospheric pressure, CO₂ / 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 CO₃
- 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

±0.15 °C @ 0 ... 20 °C / 32 ... 60 °F Accuracy

±0.1 °C @ 20 ... 50 °C / 68 ... 122 °F

Ambient Humidity

Measuring range 0 ... 100 % RH Resolution 0.1 % RH

±1.5 % RH @ 0 ... 80 % RH Accuracy ±2 % RH @ 80 ... 100 % RH

Atmospheric Pressure

Measuring range 300 ... 2000 hPa

Resolution 0.1 hPa

±2 hPa @ 25 °C / 77 °F and 750 ... 1100 hPa Accuracy

±4 hPa @ 0 ... +50 °C / 32 ... 122 °F

and 300 ... 1200 hPa

Measuring range 0 ... 40000 ppm

Resolution 1 ppm

±(30 ppm + 3% of measured value) Accuracy

@ 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

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

Dimensions

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

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