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PPMonitor Home

For the measurement of Temperature, Humidity, Carbon Monoxide, Carbon Dioxide and Motion

MULTIPLE APPLICATIONS: perfect for use in houses, apartments, sheltered accommodation and nursing homes.

SICK BUILDING SYNDROME

Sick Building Syndrome is concerned with a range of symptoms that can effect a workers in various industrial environments.

Common symptoms include:

- Fatigue
- Headaches
- Shortness of breath
- Eye & throat irritation
- Itchy or dry skin
- Nausea

KEY DESIGN FEATURES

- Small and compact design
- Easy to install
- Supplied with PPMonitor software for graphical representation and reports.
- Connect wirelessly via ZigBee technology to produce complete graphical representation of IAQ on user's PC
- Other PPMonitor units can be added to the wireless mesh network to view other problem areas. This gives a more detailed representation of a buildings IAQ as a whole
- Capable of remote monitoring and triggering alarms
- Proven excellent long-term sensor stability
- Supplied with Calibration Certificate for sensors

The average person spends 90% of their time indoors. High levels of indoor pollutants can cause illness, discomfort and effect productivity. The Indoor Air Quality (IAQ) in homes can be far worse than outside air quality. Many modern houses are well insulated (walls and roofs), draft proofed and double-glazed. IAQ has been sacrificed by implementing these energy saving steps since there is no supply of essential fresh air being introduced.

People are less likely to open a window to dilute the indoor pollutants with outdoor fresh air due to factors such as high heating costs, security concerns and noise.

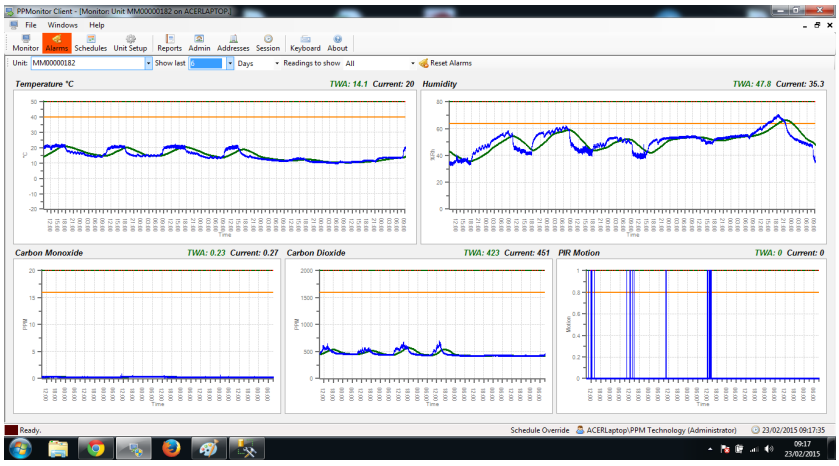
Over ventilated/over heated homes are not cost effective. IAQ monitoring can help combat the difficult balance of saving money/energy whilst maintaining a comfortable and healthy home environment.

The monitoring of Temperature, Humidity and Carbon Dioxide are all energy efficiency indicators relating to building comfort and adequate ventilation.

Carbon Monoxide monitoring is a household safety feature.

The motion sensor has a number of useful applications such as conditions in insurance policies. It can be used as a security feature to sense the presence of intruders. E-Mail alerts can be set up so immediate action can be taken when an intruder is detected.

The sensor is suitable for use in independent living schemes for the elderly where a lack of movement may suggest there is a problem.



Blue Lines are actual concentration values.

Green Lines are Time Weighted Average (TWA) readings. The lines of the graph appear much smoother as a result of the fact that the values are a running average over 8 hours.

PLEASE NOTE

Minimum Requirements: Windows 7 Pro or Windows 8/ 8.1

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The PPMonitor Home has been designed to give a detailed visual representation of indoor air quality in a building, as part of the home management standards. The system can show precise changes in concentration of the IAQ parameters over time.

The PPMonitor Home enables the user to control and run the IAQ sampling units via the sophisticated and reliable ZigBee wireless network.

The Manager PC connects to the Zigbee network via a wireless USB dongle; which is capable of transmitting and receiving information from the PPMonitor Home monitoring units.

The Manager PC can view, run and control the real-time monitoring and data logging of air quality in a building at the click of a button by accessing and utilising the PPMonitor software.

The PPMonitor software enables the data to be viewed graphically, produce reports and statistical data, run schedules as well as alarm functions and notifications.

It is possible to set up an Ethernet Access Point (EAP) to the wireless network. This allows the wireless modules to be accessed from any location worldwide via the Internet; provided the necessary internet address, firewalls and gateways are enabled on the local network.

UNIT SPECIFICATIONS

- Dimensions:
  145 x 145 x 55mm
- Operating Range:
  0-40^{o}C, 15-90% RH
  1 minute
- Data Logging Frequency:
  1 minute
- Installation: Wall mounted via VESA standard bracket.
- Mains or Battery Powered:
  12v DC via external DC adaptor with 2.5mm diameter jack plug

ZIGBEE WIRELESS SPECIFICATIONS

- Low Power 2.4GHz IAN Band
- Data Rate: 250kbit/s over the air data rate channels 16 channels
- Power:+3dBm output, +5dB boost mode
- Sensitivity: High sensitivity of – 98dBm typical at 1% packet error rate
- Different antennae options for the different network coverage required

SERVICES AVAILABLE

- Technical Support
- Hardware Support
- Skype & Team Viewer Support
- Factory Calibration & Service
- Upgrades
- Bespoke System Development

Temperature °C /°F and Relative Humidity%

Temperature and Relative Humidity are common IAQ factors implicated in occupant discomfort. In terms of a building's air quality, elevated temperatures increase the off gassing of hazardous gases from building materials. High % Relative Humidity conditions favour mold and bacterial growth.

- Interchangeable digital CMOSens®
- Accurate to ±0.4°C, ±3% RH . Optional upgrade to ±0.3°C, ±1.8% RH
- Calibrated to ISO/IEC17025. Traceable to NIST and the 'National Physical Laboratory'.

Carbon Dioxide CO_2

High CO_2 level indicate a problem with overcrowding or inadequate outdoor air ventilation rates.

CO_2 levels increase markedly during periods of human activity. CO_2 concentrations above 1,000ppm cause occupants to feel sluggish (low productivity).

- Non Dispersive Infra Red (NDIR) sensor
- Measures 0-2000 ppm CO_2
- Accurate to ±30 ppm ±5% measured value
- Automatic Background Calibration

Carbon Monoxide CO

CO often goes undetected prior to detrimental levels of exposure leading to short-term productivity issues and long-term health implications. It is poisonous and produced by faulty heating systems. Conventional gas fire alarms cannot detect low-levels of CO. Long-term low-level exposure to CO will also cause health issues

- Electrochemical Sensor
- Measures 0-100 ppm CO
- Resolution <0.5 ppm filtered signal for improved performance
- Zero drift 0.1 ppm /year

Motion

Home security can be monitored with the addition of a motion sensor.

This sensor detects changes in infrared radiation; which occur when there is slight movement by a person (or object) that is different in temperature from the surroundings.

As this sensor detects temperature differences, it is well suited to detecting the motion of people by their body temperature.

- Passive Infra Red sensor
- Wide sensing area 10 M

EXTENDED TECHNICAL SPECIFICATIONS AVAILABLE ON REQUEST

ISO 9001
REGISTERED FIRM

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