

SICK BUILDING SYNDROME

Sick Building Syndrome is concerned with a range of symptoms that can effect a worker/ learner in particular building.

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.

PPMonitor Office Comfort

For the measurement of Temperature, Humidity and Carbon Dioxide.



MULTIPLE APPLICATIONS: perfect for use in offices, schools, libraries, hospitals and new build properties.

Indoor Air Quality (IAQ) is an important part of building management. Poor IAQ reduces productivity of workers in a workplace, increases absenteeism and impairs learning in schools. IAQ also has an impact on health. Workplaces are at an increased risk of IAQ problems due to buildings regulations for sealed buildings.

Carbon Dioxide (CO₂) is generated indoors by people breathing. Elevated indoor CO₂ concentrations are directly related to the number of occupants in the building. CO₂ is a good indicator of indoor ventilation accuracy. CO₂ levels increase markedly during periods of human activity (office hours). CO₂ concentrations above 1,000ppm cause occupants to feel sluggish (low productivity).

Monitoring temperature and humidity can lead to significant energy savings. Over ventilated buildings are not cost effective. IAQ monitoring will help to combat the difficult balance of saving money/energy whilst maintaining a comfortable and healthy work environment.

Temperature is amongst the most common of indoor air environmental factors implicated in occupant discomfort. It is often recognised as an aggravating factor. Numerous studies have reported an association between air temperatures and sick building syndrome symptoms where perceptions of indoor air quality worsened at elevated temperatures.

Relative Humidity is reported to be a substantial indoor air environmental factor implicated in occupant discomfort. High %Relative Humidity is an indicator of conditions favourable to mold and bacterial growth.

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. .

- 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 CO₂

High CO₂ levels indicate problems with overcrowding or inadequate outdoor air ventilation rates.

- Non Dispersive Infra Red (NDIR) sensor
- Measures 0-2000 ppm CO₂
- Accurate to ±30 ppm ±5% measured value.
- Automatic Background Calibration

**EXTENDED TECHNICAL
SPECIFICATIONS AVAILABLE
ON REQUEST**

UNIT SPECIFICATIONS

- Dimensions:
82 x 82 x 31mm
- Operating Range:
0-40°C, 15-90% RH
- Data Logging Frequency:
1 minute
- Installation: Wall mounted
via 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 Sup-
port
- Factory Calibration & Service
- Upgrades
- Bespoke System Develop-
ment

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

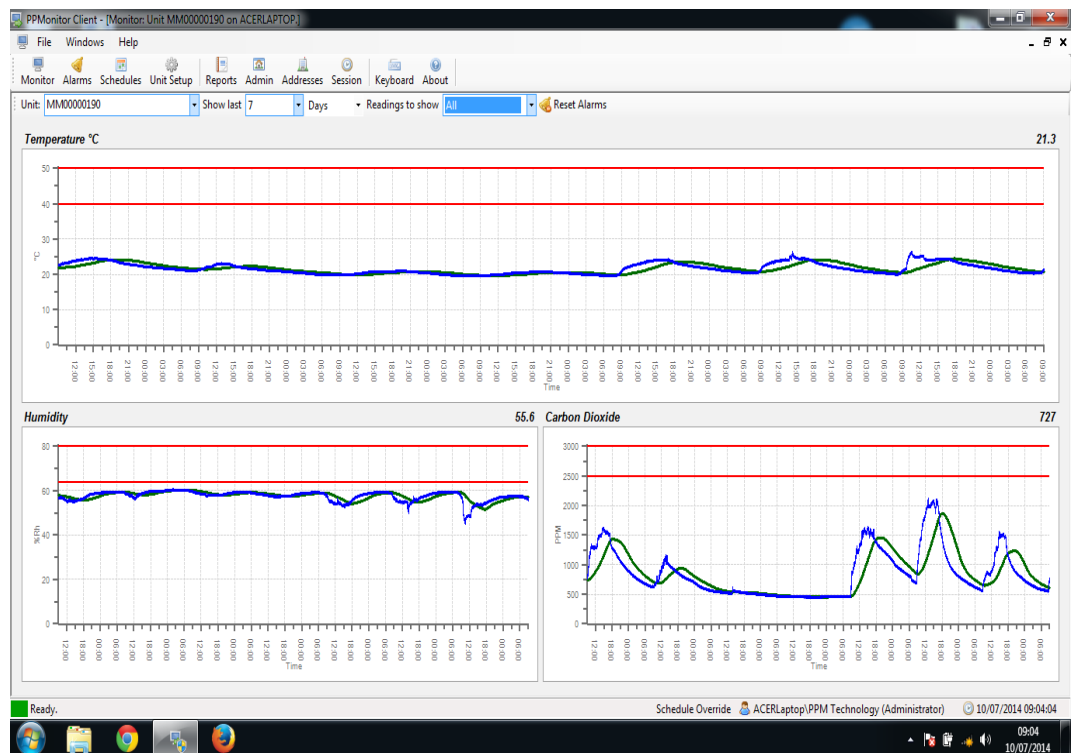
The PPMonitor Office Comfort enables the user to control and run the IAQ sampling units via the sophisticated and reliable ZigBee wireless network.

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



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



PPM Technology Ltd
Unit 34-37 * Cibyn Industrial Estate
Caernarfon * LL55 2BD * Wales / UK
Tel: +44 (0)1286 676 999
Fax: +44 (0)1286 671 811
sales@ppm-technology.com