Touch Screen IAQ Profile Monitor

INDOOR AIR QUALITY

Indoor Air Quality (IAQ) has become an important part of building management as it can impact on the health, safety and productivity of the people who use the buildings in question. An IAQ Profile is a visual presentation of indoor air quality. A good IAQ Profile describes precisely changes in the concentration levels of selected air quality parameters in an indoor environment over a period of time.

Common factors that can lead to an unhealthy Indoor Air Environment include:

- Poor Ventilation
- Airborne Pollutants (Dust, Carpet Fibers, Fungal Spores)
- Chemical Pollutants (Light industrial chemical substances, cleaning substances)
- Ozone.
- High concentrations of Total Volatile Organic Compounds (TVOC's), Carbon Monoxide and Formaldehyde
- Pollution from external sources (e.g. fumes)

SICK BUILDING SYNDROME

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

Common symptoms include:

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

The Touch Screen IAQ Profile Monitor is a stand-alone Indoor Air Quality (IAQ) monitoring unit, capable of continuously monitoring multiple IAQ parameters. Built with an integrated 3.5" 'touch screen' panel, sensor readings are displayed continuously and in real time.

- A compact IAQ monitor for use as part of buildings management standards.
- Built in 'touch screen', displaying current IAQ parameters in the building.
- Small compact design, easy to install and operate.
- Wall mountable using a standard VESA wall bracket
- The unit includes a built in USB port for downloading data quickly and easily.
- Each unit is configurable with up to 8 parameter sensors.
- Can be used as a stand-alone monitor or as part of a wider IAQ monitoring network.

The user is able to navigate through the various sensors simply by touching the panel. The 'touch screen' software allows simple control and navigation; the user can view the data graphically, create monitoring schedules, as well as enable alarm functions and notifications for more effective and economical building management.

Functions and Applications.

- IAQ complaint investigation and analysis.
- HVAC system performance analysis.
- Health and comfort assessment.
- Labour saving and cost-effectiveness.
- Energy efficiency.
- Ensuring safety of building occupants.
- To comply with national safety regulations and legislation.

In order to accurately understand a building's indoor air quality, it is advised to simultaneously monitor various Indoor Air Quality parameters including gases, temperature and humidity. PPM Technology's Touch Screen IAQ Profile Monitor enables instantaneous monitoring of a number of parameters within a single instrument.

SPECIFICATIONS

Mains Powered: 12v DC via external DC adaptor with 2.5mm diameter jack plug

Operating Range: 0-45°C, 15-90%RH

Display: 320 x 240, Resistive Touch.

Dimensions: 240mm x 240mm x 55mm (Houses 6 IAQ parameter sensors as well as temperature and humidity)

Easy to Install: Touch screen Unit easily wall mounted via VESA standard bracket.

Software: Built in PPMonitor IAQ management software.

Sampling Rate: Up to 8 parameter data values every minute.
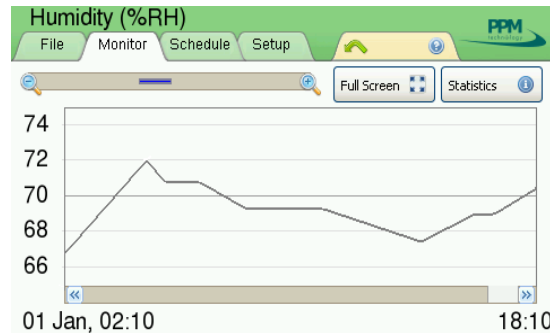
ADDITIONAL FEATURES

- Export data into PPMonitor Software suite.
- Internal aerial option available.
- Additional PPMonitors can be connected to the Touch Screen instrument over Zigbee technology.
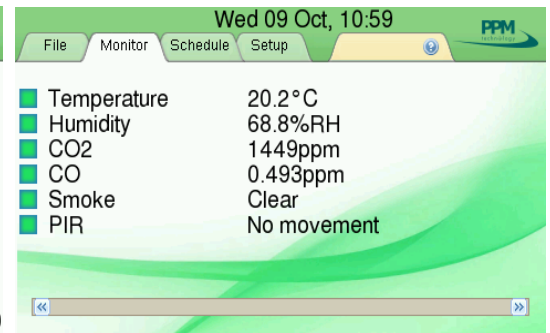
SERVICES AVAILABLE

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

Software Graph

Sensor List

Sensor Options

The Touch Screen IAQ Profile Monitor incorporates a variety of advanced gas sensor technologies to monitor the target gases including NDIR, PID and Electrochemical.

Full list of available sensors options detailed on website.

ZigBee Wireless Technology

Low Power: 2.4 GHz IAN Band

Receiver: Different antennae options for the different network coverage required.

Data Rate: 250kbit/s over the air data rate channels 16 channels (802.154.4 channels 11 to 26)

Power: +3dBm output power (+5dB boost mode.

Sensitivity: High sensitivity of – 98dBm typical at 1% packet error rate.

Environments and Industries

- Hospitals and other care facilities.
- Laboratories, Clean-rooms and Research facilities.
- Cultivation farms and the industrial agriculture sector.
- Museums, galleries, cultural preservation environments.
- Office Buildings and work environments
- Industrial Plants and Factories.
- Residential Buildings, educational facilities and other public buildings.
- Ice Rinks and Arenas.
- Indoor swimming pools.

Optional Extras

GSM Module - Allows you to receive status updates and alarm alerts from the unit via text message to a mobile device.

Wifi Module - Allows you to connect the IAQ monitor to your home/office network with the ability to download sensor data from the unit to another computer.

i button - Allows multiple users to log into the instrument and also provides added security to the instrument. Can be used as a means of monitoring staff activity with users logging in and out of various areas of a building.