

CHANGE IS IN THE AIR

REAL-TIME MONITORING TO PREVENT AND SOLVE
INDOOR AIR QUALITY ISSUES AND CONCERNS



ABOUT US

Canairi's solution represents an integral part of any Indoor Air Quality (IAQ) Management Plan for the protection of builders, property owners and managers, company officers, directors, their employees and building occupants.

Canairi provides automated monitoring of buildings for detection and location of moisture intrusion in the building envelope along with Indoor Air Quality contaminant monitoring to assist with compliance issues. Upon detection the system informs appropriate personnel of the intrusion so action can be taken before it becomes a costly repair or construction defect lawsuit.

Our core focus is Indoor Environmental Risk Management, and we will create a tailored solution that meets your exact needs.

Our objective is simple.

We want to help you meet all of your Building Envelope and Indoor Building Performance and provide you with supporting documentation, which is analyzed and signed by a Certified Indoor Environmental Consultant (CIEC) to prove your diligence to all stakeholders.

How do we do this?

We identify and solve key issues and then develop structured and progressive plans to implement the complete management plan.

- We listen
- We analyze
- We discuss
- We solve
- We integrate

We offer a FREE initial walk-through and consultation. You may then spend time with one or more of our consultants discussing objectives and identifying your needs.

We then review the services which may be required that will bring you the most benefits and alleviate the PAIN you may be experiencing in solving it on your own.

GOING GREEN

Do your buildings create a healthy environment for their occupants? The building industry is increasingly focused on making its buildings greener, which includes using healthier, less polluting and more resource-efficient practices. Indoor environmental quality (IEQ) refers to the quality of the air and environment inside buildings, based on pollutant concentrations and conditions that can affect the health, comfort and performance of occupants -- including temperature, relative humidity, light, sound and other factors. Good IEQ is an essential component of any building, especially a green building.

Creating a better indoor environment can help building owners, managers, occupants, architects and builders to minimize or eliminate the negative health effects, liability, bad publicity, and costly renovations and repairs often associated with IEQ problems. Improving IEQ involves designing, constructing, commissioning, operating, and maintaining buildings in ways that reduce pollution sources and remove indoor pollutants while ensuring that fresh air is continually supplied and properly circulated.



can.air-i

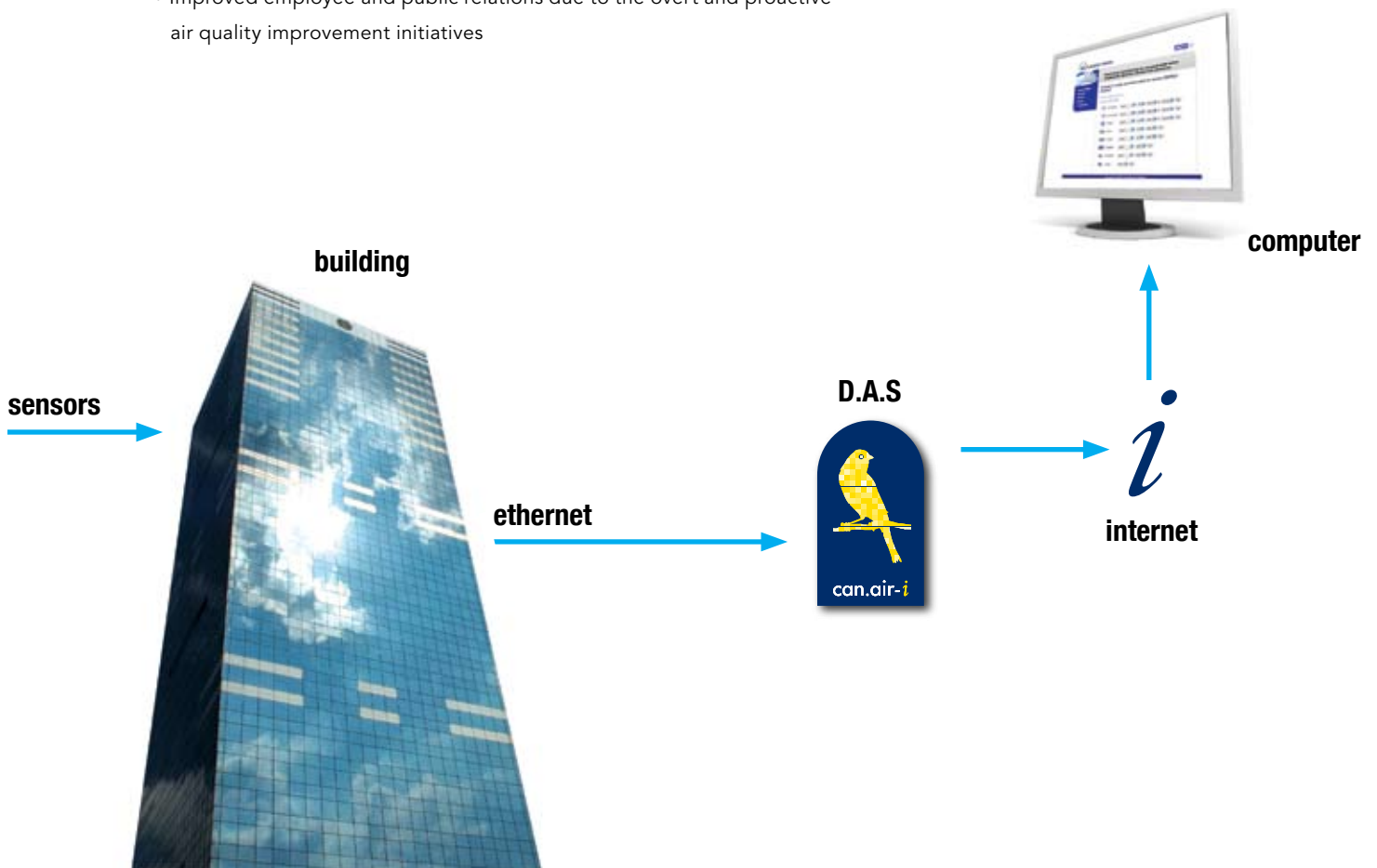
Innovative Air Quality introduces Canairi, a new technology to measure indoor air quality contaminants, detect and locate moisture intrusions within the building envelope and is monitored continuously within a controlled environment in real-time.

Think of Can.air-i as a stand alone power tool comprised of high-tech sensors and software that integrates Indoor Air Quality (IAQ), Moisture Management, Energy Efficiency and building economics into one complete system.

Building occupants will complain less frequently about "stuffy" rooms, "stale" air, or "air that makes them sick". Just as important, your bottom line will be improved and you will have a cutting edge advantage in the marketability of your building.

OUR SOLUTION WILL AID IN THE RISK ASSOCIATED WITH POOR INDOOR AIR QUALITY

- Evidence proactive due diligence to avoid costly litigation
- Help Prevent "Sick Building Syndrome"
- Decrease absenteeism and increase productivity through reduced respiratory ailment symptoms resulting from improvements in air quality
- Provide documented diligence signed off by an environmental expert
- Reduce and prevent worker health claims related to poor indoor air quality
- Promote a positive Corporate Image
- Send our experts to investigate any Indoor Air Quality concerns and we will assist you in solving them immediately
- Improved employee and public relations due to the overt and proactive air quality improvement initiatives



ENVIRONMENTAL SUPPORT AND ANALYSIS

Innovative Air Quality will conduct an initial walkthrough of the site and provide an analysis of the building(s) infrastructure to determine the best environmental solution to meet your exact needs.

Upon installation, if any concern is detected by Can.air-i which cannot be solved through simple methods of dilution, Innovative Air Quality's personnel will be on call 24 hours a day, 7 days a week to consult through crisis periods offering solutions to solve both your immediate and long term needs.

Each quarter the documented results are analyzed and signed off by an Expert Witness on the Court of Queens Bench for Indoor Air Quality Investigations and by a Certified Indoor Environmental Consultant (CIEC). The analysis is then transformed into a detailed report and transported digitally through Can.air-i's software interface.

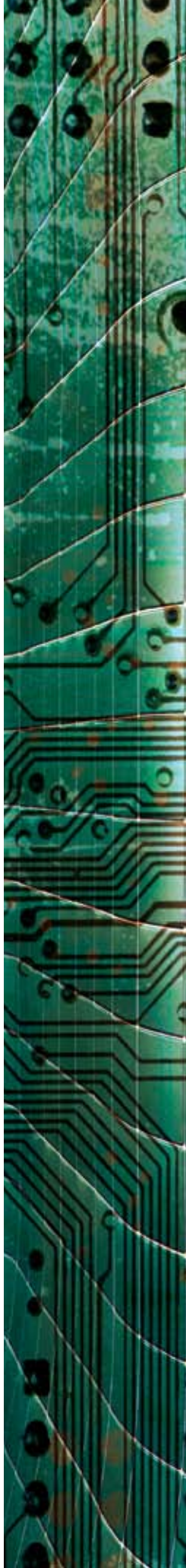
A signed letter of diligence is sent to our clients on a quarterly basis to act as litigation preventative measures and proof of diligence by providing supporting documentation to all stakeholders.

Our solution may also assist in securing increasingly difficult Indoor Air Quality insurance packages.

Innovative Air Quality's strategic partners, DF Technical & Consulting Services Ltd., are experts in mechanical systems evaluations; including design balancing and maintenance, Safety, Air Quality and Environmental Investigations.

COMPLETE INDOOR AIR QUALITY ANALYSIS AND INVESTIGATIONS

- Development and implementation of indoor air quality management programs
- Baseline studies and detailed surveys
- Sensor Calibrations
- Indoor Air Quality Training
- Mold investigations and remedial design
- Biological counts and identification of mould and fungi
- Temperature and Humidity analysis
- Dust particle counting to evaluate filtration effectiveness and local dust sources
- Air movement profile
- Mechanical system review for all related air handling units to evaluate inter-relationships, possible sources and pathways of contaminants
- Physical assessment of possible contributing factors
- Complete evaluation of the collected data, formulated recommendations to reduce or eliminate the specific concerns and symptoms



TECHNOLOGY

The **Wireless Precision Data Acquisition Node** (WiDAQ) is a high precision measurement device designed for remote structure monitoring. The built-in 24-bit A/D converter and low noise high precision measurement circuitry facilitates data acquisition from a wide variety of sensors.

The hybrid wireless/wired capability of the WiDAQ offers several benefits over a wireless only system. Wired nodes act as coordinators for the wireless nodes allowing wireless units to extend battery life. The wired backbone operates over a robust Controller Area Network (CAN) and permits dense sensor deployments in harsh environments.

The **Wireless Data Acquisition Unit** (WiDAQ) Pressure version delivers high precision measurements using its 24-bit A/D converter and low noise high precision measurement circuitry. This device can accurately measure external sensors based on resistance and voltage as well as differential pressure using an onboard pressure sensor.

The **Building Intelligence Gateway** - nicknamed "BIG" is the central on-site monitoring device used to configure and view all WiDAQ data locally. The BIG also transports your data off-site to the Can.air-i Monitoring Centre by 802.11, RJ-45 ethernet or through the cellular network by GSM/GPRS or CDMA. Remote wireless sensor configuration has never been easier - all with familiar Windows software.

AFTER-MARKET TECHNICAL SUPPORT

Information is power, and those who harness this power can gain a competitive edge for their company.

Innovative's team is comprised of a solid network of experts available 24 hours a day 7 days a week to troubleshoot any database, sensor, or crisis situation and offer ongoing after market technical support for users.

Innovative Air Quality has a support team consisting of experts in:

- Software design & development
- Engineering & project management
- Web technology integration
- Database administration
- Automation engineering, control systems
- Advanced optimization algorithms
- PC Network and Support
- Comprehensive knowledge of computer operations concepts, and strategies
- Data systems, MIS, IT Resource
- Strategic deployment of local area networks
- Advanced Technology training and implementation

OUR CLIENTS

We strive to be a strategic partner with our clients by leveraging our expertise and experience to provide innovative, responsive and cost-effective indoor air quality solutions.

We have the experience, talent and proven results to help the following clients solve indoor environmental challenges:

- Architectural firms
- Commissioning providers
- Retail
- Arenas
- Fitness Facilities
- Police Stations and Fire Departments
- Sustainable Projects
- Retirement Homes
- Hotels
- Apartments/Condominiums
- Resorts
- Contractors for New Construction and Major Renovations
- Engineering Firms
- GREEN Builders
- Financial and Insurance Firms
- Municipal, provincial and federal government agencies
- Laboratories
- Property Managers and Operators
- Universities
- Research institutions
- Industrial Buildings
- Manufacturing Companies restricted by Occupational Health and Safety Standards
- Hospitals
- Mines
- Processing Facilities

SOLUTIONS

Investigation & Remediation Monitoring

Traditional inspection regimes take a single measurement with a handheld meter at one point in time. Canairi's solution allows the investigator to leave the instrumentation in place in the wall or roof system under investigation and have it wirelessly report back critical information, accessible online, allowing trends and data to be analyzed at any time.

Indoor Environmental Monitoring

In today's increasingly competitive global market, excellence in environmental management can enhance the reputation and position of a company within its industry. At Innovative we specialize in indoor environmental monitoring, providing tools such as Canairi to manage environmental issues proactively and efficiently.

We manage environmental issues so efficiently we will guarantee to improve our clients' profitability and competitive advantage by allowing them to identify and respond to opportunities and threats within the changing regulatory and corporate environments.

Research Monitoring

Canairi provides Structure Monitoring Technology in the lab and in the field. Easily deployed and supported by experienced technicians, presentation ready results of the data are immediately viewable, while raw data is available for detailed analysis at any time.

Roof Leak Scan & Monitoring

Canairi provides a comprehensive suite of roof monitoring solutions for new or existing roof systems:

Roof Investigation Monitoring

Installation of inspection electronics to monitor roof moisture content at various levels.

Roof Scan

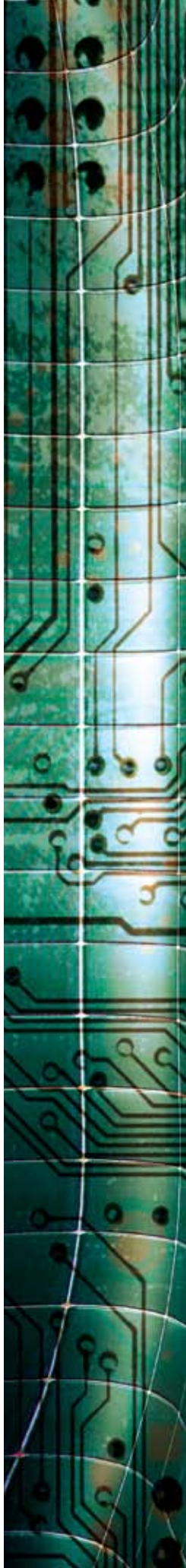
Electric Field Vector Mapping - manual procedure which evaluates membrane integrity during installation.

Roof Monitoring

Active reporting linear moisture sensors installed under the roof membrane.

CUSTOMER SITE REQUIRED FACILITIES CHECKLIST

- Standard North America (24 V) GROUNDED (3-prongs) power outlet.
- Standard (RJ-45) ethernet network outlet with access to the internet.
- Out-of-the-way, low-traffic location to minimize the chance of data loss.
- The internet connection must allow incoming traffic on port 22
- The internet connection must allow outgoing HTTP and SFTP traffic. This does not normally require any special configuration.
- Static IP for the supervisory computer is preferred. If DHCP is used, IAQ must be advised of any IP changes for their records.



SENSORS

Can.air-i series:

3 & 4 wire loop

The Can.air-i 3&4 wire loop series are rugged, reliable analog transmitters available with a wide variety of sensor types to detect a wide range of gases, including solid state, electrochemical, catalytic, and infrared. Several enclosure options are available to meet the requirements of many different applications. Can.air-i transmitters feature 4 to 20 mA output signals, automatic thermal resetting fuse, and optional dry contact relay.

Gas Type:

Ammonia – NH₃ Electrochemical 0-500 ppm
Combustible Gases Solid State 0-50% LEL
Combustible Gases Catalytic 0-100% LEL
Chlorine – CL₂ 0-5.0ppm
Carbon Dioxide – CO₂ IR 0-2000 ppm (ASHRAE 1969 IAQ max PEL)
Carbon Dioxide – CO₂ IR 0-5000 ppm (leak detection of CO₂ storage tanks)
Carbon Dioxide – CO₂ IR 0-9,999 ppm, and 0-5%
Carbon Monoxide – CO Industrial 0-250ppm
Carbon Monoxide – CO HVAC 0-200 ppm
Ethylene – C₂H₄ 0-2000 ppm
Ethylene Oxide – ETO 0-20 ppm
Formaldehyde – HCHO 0-10 ppm
Hydrogen – H₂ 0-2000 ppm
Hydrogen Sulphide – H₂S 0-50 ppm
Nitrogen Dioxide – NO₂ 0-10.0 ppm
Nitric Oxide – NO 0-100 ppm
Oxygen – O₂ Electrochemical – 0-25.0% Volume
Oxygen – O₂ Galvanic 0-100% Volume
Ozone – O₃ 0-2.00 ppm
Sulphur Dioxide – SO₂ 0-20 ppm
Hydrogen Cyanide – HCN 0-20 ppm
Refrigerants R12 0-2000 ppm
Refrigerants R22 0-2000 ppm
Refrigerants R11, R134A, R507 0-2000 ppm

Moisture Detection Sensor (MDS)

Is a water sensing device placed in areas prone to water intrusion. It serves as the point of contact in the system to detect water or high moisture penetration.

Can.air-i Series

2 wire transmitters

The Can.air-i analog 2 wire transmitter series are available with a wide variety of electrochemical sensors to detect a wide range of gases. Two enclosure types are available to meet the requirements of many different applications. ATW transmitters feature 4-20 mA linear output signals, automatic thermal resetting fuse and automated calibration.

Gas Type:

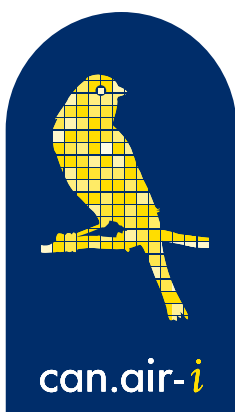
Ammonia – NH₃ Electrochemical 0-500 ppm
Chlorine – CL₂ 0-5.0ppm
Carbon Dioxide – CO₂ IR 0-2000 ppm (ASHRAE 1969 IAQ max PEL)
Carbon Dioxide – CO₂ IR 0-5000 ppm (leak detection of CO₂ storage tanks)
Carbon Dioxide – CO₂ IR 0-9,999 ppm, and 0-5%
Carbon Monoxide – CO Industrial 0-250ppm
Carbon Monoxide – CO HVAC 0-200 ppm
Ethylene Oxide – ETO 0-20 ppm
Hydrogen – H₂ 0-2000 ppm
Hydrogen Sulphide – H₂S 0-50 ppm
Nitric Dioxide – NO₂ 0-10.0 ppm
Nitric Oxide – NO 0-100 ppm
Oxygen – O₂ Electrochemical – 0-25.0% Volume
Ozone – O₃ 0-2.00 ppm
Sulphur Dioxide – SO₂ 0-20 ppm
Hydrogen Cyanide – HCN 0-20 ppm

Point Moisture Measurement (PMM)

For direct contact measurement of moisture content in wood or moisture level in gypsum, concrete, masonry. Use of isolated probes ensure the measurement of the moisture level at the desired layer in the wood or substrate. Sensor has built in temperature sensor for temperature correction for moisture content readings.

Duff Moisture Measurement (DMM)

For indirect measurements of moisture content in gypsum, concrete, masonry or similar substrates. The lab calibrated blocks have known moisture related characteristics which when placed in the field - the moisture environment can be precisely measured and a relative moisture content of the surrounding area be reported.



For more information contact Can.air-i at: 403 383-7957 or visit us at www.canairi.com