



Smarter HVAC systems with Aranet wireless sensors

Solve problems with Aranet IoT

Modern HVAC needs to be agile and adaptable. Implementing a sensor network enables real-time feedback and control, helping systems respond quickly to changing conditions and occupant needs.



Energy efficiency

Running HVAC machinery is increasingly expensive as electricity prices rise. Optimizing equipment efficiency and reducing overall power usage is a high priority. An **Aranet energy meter and pulse counter kit** automatically tracks consumed energy. This means managers can reduce flows to underutilized areas, troubleshoot problems, and identify improvements.



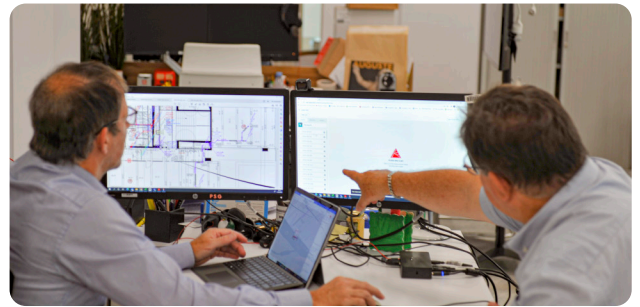
Indoor air quality control

Cultivating reasonable parameters is central to human efficiency and health. Maintaining consistency decreases the likelihood of moisture buildups, preventing condensation and mold. With near real-time data flows from Aranet sensors, operators have specific information on key parameters like occupancy, **CO₂, temperature, humidity**, opened/closed doors/windows, etc.



Maintenance and repair

HVAC equipment degrades over time. Without regular maintenance, problems within a system can decline into costly repairs and require more energy to function. **Wireless sensors** detect if, when, and where equipment isn't operating properly. For example, Aranet **differential pressure sensors** can pinpoint filter issues. Early detection of minor errors help prevent larger, more expensive fixes.



Regular monitoring

The Aranet ecosystem has wide-range **integration capabilities**. Modbus, MQTT, and BACnet protocols allow for onsite integration with existing HVAC and building management systems (BMS). Additionally, **Aranet Cloud API** can integrate monitoring data into existing enterprise software solutions. This provides managers with a full picture of indoor environments.



Building management

Keeping employees comfortable and healthy is critical for productivity. In addition to tracking parameters like **temperature**, **humidity**, and **particulate matter (PM)**, sensor networks help promote cleanliness, sustainability, and wellbeing for inhabitants.



Data safety

Base stations have internal memory, so data can be obtained and stored without interruption, even in cases where an internet connection is lost. After the connection has been restored, base stations send that information along to Aranet Cloud.



Aranet Cloud

Access centralized data for every connected sensor under a single dashboard. Using an internet connection, any data can be requested and filtered relative to specific needs. This means historic information is accessible from anywhere.



Wireless sensors

The installation process for incorporating cables is significant. However, a wireless network won't require lengthy construction efforts, disruptive drilling, or tangling lines. There's also no threat of damage (and maintenance) to exposed lines.

Implementing a wireless monitoring network increases efficiency, saves energy, and troubleshoots problems. Make your HVAC smarter with Aranet.

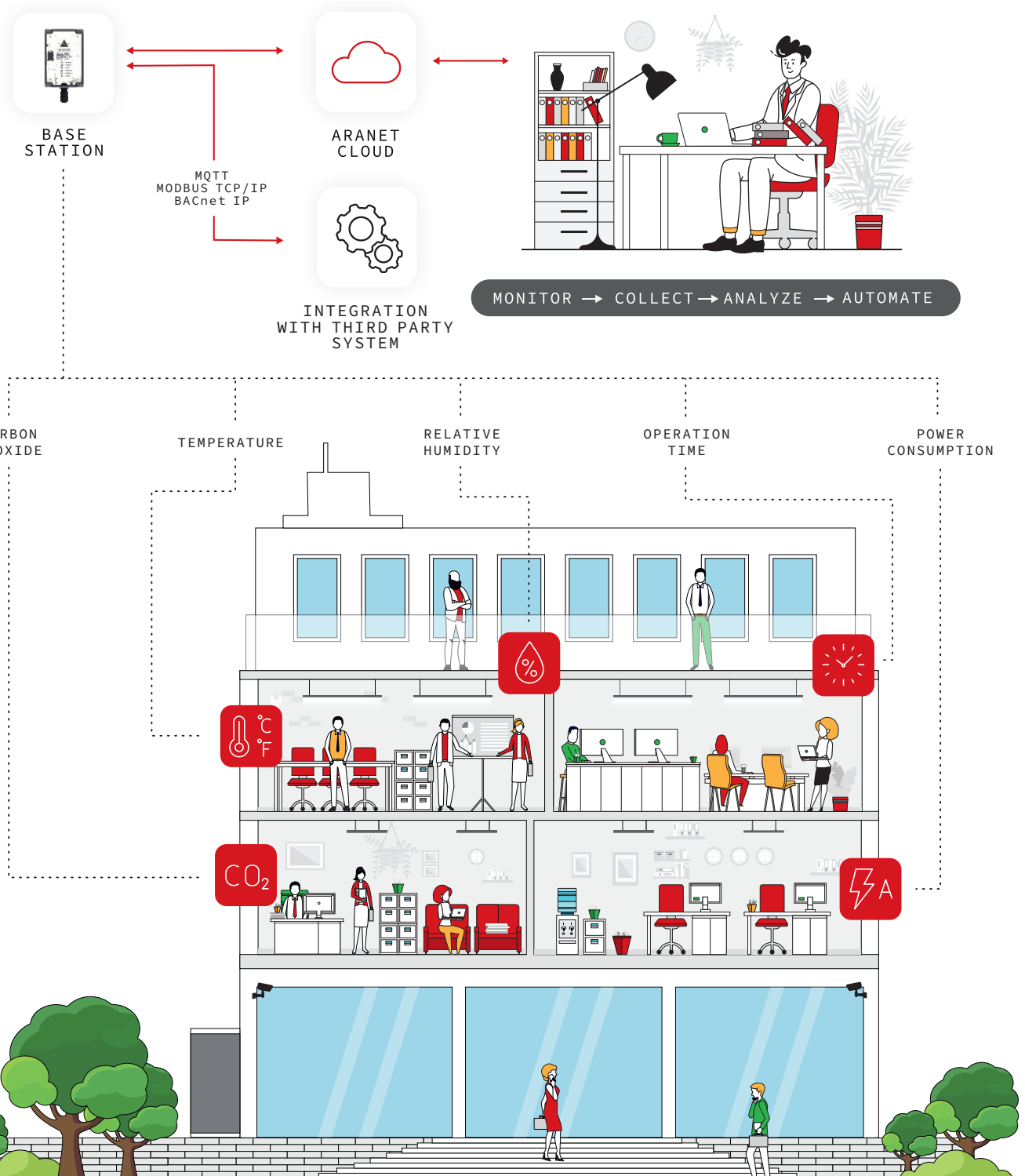
The Aranet IoT ecosystem



1. Specialized wireless sensors are deployed.
2. Base stations collect sensor information.
3. Aranet Cloud stores data for management.
4. Solutions can integrate with third-party IT.

Benefits

With building-specific data, owners can track energy usage, identify patterns, and take informed actions to improve flows.



Learn more on www.aranet.com or reach out directly at info@aranet.com.