Best Quality Indoor Air with Vaisala’s HVAC Sensors

/ CUSTOMER STORY

VAISALA
Infosys is the second largest Indian IT consulting company with 200,000 plus employees and revenue of over USD 10 billion. With headquarters in Bengaluru the company has its development centers in over 16 locations pan India and one campus in China. Currently Infosys is using Vaisala’s HVAC sensors in all its projects.

About Infosys

Infosys provides business consulting, information technology and outsourcing services. Infosys is one of the only few IT companies in India who designs, builds, and operates its own campuses and office buildings. The campuses are typically more than 100 acres with minimum 20,000 employees and comprises of office buildings, Employee care centers (accommodation facility), food courts, retails stores, entertainment and sports facilities, the majority of which are mechanically ventilated.

Need for Accurate HVAC Sensors

Infosys believes “what can be measured can be managed”. With the total built up area of 44 million sq ft across 16 campuses, around 35% is air conditioned and requires various meters and sensors for effective remote performance management. HVAC system condition monitoring becomes a crucial requirement considering Infosys’s goal to provide best indoor environmental quality (IEQ) and to provide most productive work spaces in the world to its

Challenge
- Providing best thermal comfort and indoor air quality
- Energy-efficiency
- Stable HVAC sensors

Solution
- Vaisala’s HVAC sensors HMD110, GMD20, GMW90 series, HMW90 series, GMT220 series, and HMS112.

Benefits
- Accurate measurement data
- Good indoor air quality
- Well-being of employees
employees. IEQ has a direct impact on employee productivity.

**Infosys’s Requirements**

When the idea of installing HVAC sensors was floated, around a lot of research underwent into finalizing the right sensor. The sensors have to pass all the requirements as per stringent Infosys standards. “In our pursuit of finding the best HVAC sensors, we came across Vaisala. We tested Vaisala’s sensors extensively in our in-house lab and we found that they met our accuracy, reliability, and warranty requirements”, says Mr. Vikas Makkar, Regional Manager Infrastructure Team at Infosys.

Post the detailed study and testing, Infosys has been using Vaisala’s HVAC products in all their projects since 2015.

“Sensors are very important for us as we do continuous measurement and verification of building performance at granular level through detailed Integrated building management system”, says Mr. Makkar. “We believe that the sensors are a basis for all energy savings logic that we have in our building management systems like demand-controlled ventilation, free cooling, fan modulation, and pump modulation and also the sensors provide us with invaluable data to design our future building better, continues Mr. Makkar.

**Employee Well-Being Matters**

Apart from energy efficiency, providing good indoor environmental quality to its employees is crucial for Infosys. “We believe that a good IEQ has a direct impact on health and productivity of our employees”, says Mr. Makkar. This becomes even more important for Infosys, being an employee intensive company. As per a recent study, conducted by the National Institute of Environmental Health Sciences (NIEHS), it’s a well-known fact that abilities like strategic skills and crisis response are reduced remarkably with a slight change of just 100 ppm in the CO₂ levels. Thus the sensors play a vital role in helping enhancement of employee productivity and wellbeing.
HVAC Products Used

As of now Infosys is using Vaisala sensors mainly in measuring temperature, humidity and carbon dioxide, namely HMD110, GMD20, GMW90 series, HMW90 series, and GMT220 series. To measure the same parameters outdoors, they use the HMS112.

Why Vaisala?

The significant reason for choosing Vaisala sensors for Infosys was the 5-year stability specification for the products. Especially for humidity and CO₂ sensors which otherwise drift frequently this reason is very important. “We find that Vaisala is unique in this sense. The 5-year stability specification provides the kind of confidence and trust the customer looks for in any product. In the last 3 years we have been using the products, we have received timely support from Vaisala and are quite satisfied with the product quality,” concludes Mr. Makkar.