

## EXPERT NOTE

THE BENEFIT OF  
A HARMONISED  
MONITORING  
SYSTEM (EMS)Optimise control of your cleanroom  
with EMS

In **critical environments** such as cleanrooms, where the slightest particle or pressure variation can compromise product quality, the use of an **environmental monitoring system (EMS)** becomes essential.

An EMS enables you to meet the most stringent requirements for continuous monitoring and compliance with **ISO 14644 standards**, while offering tangible benefits for your organisation. IVTracer provides **real-time measurement** of critical parameters such as differential pressure and the number of airborne particles.

This system instantly detects any deviation from defined thresholds, ensuring that the environment remains compliant with your production requirements and regulations. **Controlling air flows and differential pressures** is essential to prevent cross-contamination in cleanrooms.

With an EMS, you can monitor and adjust pressure deltas in real time, guaranteeing a sterile and safe environment, with no risk of particles being exchanged between different zones.

IVTracer enables you to comply with the particulate cleanliness thresholds dictated by ISO 14644 and pharmaceutical industry standards (grades A, B, C, D).

All data is recorded, providing complete traceability of events. This simplifies audits and ensures that your cleanroom is always in compliance with regulations.

When thresholds are exceeded, a well configured EMS issues instant alerts to operators and managers, either via light columns or notifications on mobile devices. This responsiveness means that any drift can be corrected immediately, avoiding production interruptions.



## + Advantages of a centralised EMS

Using a centralised EMS, such as **IVTracer**:

- reduces human error,
- improves the reliability of controls
- optimises resource management. By automating the monitoring of critical parameters, you reduce manual intervention, which translates into time and cost savings.

By opting for **IVTracer**, you are investing in a solution capable of guaranteeing the quality of your processes while meeting regulatory requirements. Such a system not only enables you to maintain ideal conditions for production, but also to improve traceability, safety and productivity in your cleanrooms.



**ISO 14644 STANDARD -  
Cleanrooms and associated  
controlled environments**