



EXPERT NOTE

MONITORING OF DIFFERENTIAL PRESSURE





Advantages of an EMS for managing differential pressure

In a cleanroom, differential pressure plays a crucial role in maintaining a controlled environment and preventing cross-contamination.

What is differential pressure?

Differential pressure, or ΔP , is the difference in pressure between two adjacent spaces, usually measured to ensure that air flows in the correct direction, preventing the spread of unwanted particles from a more 'contaminated' area to a cleaner one.

Why monitor differential pressure in GMP cleanrooms?

An EMS makes it possible to maintain and check these critical pressure differences in real time, ensuring that clean air always flows to sensitive areas and that potentially dangerous particles do not migrate into protected spaces.

Guaranteed compliance and safety

Using an EMS to monitor differential pressures helps to meet the requirements of **ISO 14644 standards**, guaranteeing a safe environment in line with industry expectations. It also ensures complete traceability of events linked to pressure variations, which is essential for regulatory audits.

EMS differential pressure monitoring is a key solution for protecting products and keeping rooms clean, while reducing the risks associated with human operations.



ADVANTAGES OF EMS FOR PRESSURE MANAGEMENT

The IVTracer monitoring solution enables:

- continuous monitoring of differential pressures, immediately triggering alarms in the event of any deviation from established thresholds.
- improves responsiveness by instantly notifying operators in the event of a pressure inversion, enabling them to take immediate corrective action, thereby minimising the risk of contamination.

Moreover, alert thresholds can be customised in a flexible way. Each measurement channel can be individually configured to include specific setpoints, tolerance limits and alert parameters, depending on the needs of your environment.