

A compact design for GMP cleanroom monitoring

Monitoring systems with maximum redundancy: ultra-compact turn-key solutions



PMT introduces the PMSnode[®] system, an innovative concept with an open software structure and modular design. Optimized for integrating cleanroom sensors, temperature monitoring in cooling units, and particle counters – the PMSnode[®] system is available for virtually any sensor (TCP/IP Ethernet protocols, Power-over-Ethernet connectivity, Modbus protocols, OPC connectivity, 4-20 mA analog interfaces). The open design in particular supports connecting particle counters of any make using PMSnode[®].

First generation cleanroom monitoring systems more often than not were large additions to control cabinets with confusing internal structures and complex qualification processes. The ultra-compact design of PMSnode[®] systems is setting standards for structure and design and puts an end to massive footprint requirements for monitoring systems. Especially complex monitoring tasks can be displayed in a compact and well-structured manner by using standardized and industry-proven functional modules. Employing high-quality electronic modules that have proven their effectiveness during thousands of industrial control tasks helps to achieve maximum stability in long-term operation. The time-critical monitoring core runs on an industrial computer with advanced process specifications.

FMS 5.0 software is at the core of the monitoring process. This configuration collects GMP-relevant

monitoring results in a tamper-proof SQL database. The SQL results database can be mirrored to external servers to increase redundancy of data recording. This monitoring core can optionally be installed on a parallel-run computer; it automatically steps in should hardware problems occur on the primary computer.

In some application-typical base configurations PMSnode[®] systems can even be delivered as prequalified turn-key solutions, while still supporting customer-specific system modifications and extending the PMSnode[®] concept in large-scale systems. From partially standardised systems to customized large-scale plants, PMT continues to deliver the firstclass service that customers have become accustomed to for decades: project management, turn-key systems, GMP-compliant qualification documentation and implementation. The PMT qualification team in Germany and Europe fulfils all customer-specific requirements.