CRiSxt
Cleanroom Products
Control Systems

Technical Concept
Next Generation Laminar Flow Management in Advanced Cleanroom Manufacturing

CRiSxt is the Exyte Technology innovative Filter Fan Unit Control System for Maximum Flexibility and Cost-Efficiency

Managing environmental conditions in cleanrooms is a challenge to facility managers and users worldwide. To implement a flexible and cost-efficient air flow concept, it requires Filter Fan Unit filter and control solutions that are open to adapt to changing process layouts and production modes, minimize installation and ramp-up times, and finally maximize cost-efficiency in operation and process control.

Exyte Technology has therefore developed CRiSxt, a superior 3-level-architecture control software solution to enhance its HighTech Filter Fan Unit systems to the leading solution of its kind. CRiSxt has been designed to provide for maximum flexibility and cost-efficiency in the planning, integration, ramp-up and customer defined process control of fab-wide Filter Fan Unit systems in advanced cleanroom automation.

CRiSxt thereby reflects Exyte Technology’ experience in cleanroom design, process automation and contamination control as well as facility management. Exyte Technology HighTech Fan Unit and control systems operate more than 340,000 Filter Fan Unit systems in 160 Semiconductor, Flat Panel or Photovoltaic manufacturing facilities as well as in thousands of Pharma, Food and other industrial applications worldwide.

Features

- Full scalability for up to 75,000 Filter Fan units
- Distributed system (full functionality also without Management Level)
- Filter Fan Unit-Auto Install function
- Multilingual
- Automation Level with a comfortable GUI (iTAC)
- AutoCAD® layout import
- Independent operating system
- FMCS interface options via iGATE
- Optimized energy saving modes
- Plug & Play system technology

Keeping it Simple and Efficient

CRiSxt has been designed to simplify facility planning and management. CRiSxt is a modular system with a clear 3-level-architecture structure and unlimited options to plan, scale, integrate, operate and control Filter Fan Unit systems.

At the Field Level all of the local CRiSxt Filter Fan Unit system groups are being operated. Filter Fan Units are connected via standard patch cables and communicate via optimized network interfaces to the iTAC system in the Automation Level.

All active CRiSxt control tools are combined in the Automation Level. The local Filter Fan Unit groups are connected to the independent iTAC intelligent control system. Via iGATEs and I/O modules the system provides for real time data exchange with the superior Facility Management Control System (FMCS).

Here also the Auto Install function is located, which allows for automated installation of additional Filter Fan Units as well as the unlimited system scalability.

All control functions are located in the Fab Management Level. A CRiSxt PC-Workstation visualizes and comfortably controls the complete system. Existing AutoCAD® drawings of the layout can easily be imported and updated, if necessary, in CRiSxt. Several remote clients can be added. The system can communicate directly with the Facility Management Control System (FMCS).
A Superior System for Maximum Customer Benefit

Maximum Flexibility in Fab Layout Planning and System Scalability

The CRiSxt 3-level-architecture control system offers maximum scalability to integrate and manage up to 75,000 Fan Units even after process ramp-up.

Minimum System Installation and Ramp-Up Time

CRiSxt minimizes installation and ramp-up costs significantly. Commissioning the Filter Fan Unit system just means to switch a button. The secret is the system’s Plug & Play technology with the new Auto Install function for automated Filter Fan Unit installation within minutes. Additional remote clients can be easily switched in through the implemented server-client architecture.

Smart System Control

CRiSxt is a smart, robust operating system, independent and open with high redundancy and unlimited configuration options. The intelligent iTAC control unit can monitor and control up to 630 Filter Fan Units. The also independent iGATE is a configurable interface to transfer data to superior facility management systems via OPC or other I/O modules. Other network interfaces are on request.

Maximum Cost-Efficiency and Customized Process Management

CRiSxt can be individually programmed to re-defined customer parameters comprising laminar flow velocity through motor speed adjustments in each Filter Fan Unit group; in-depth error diagnosis and reporting to the fab management system; optimized energy-saving-modes with day/night programs, fab-zone specific operation modes or shut-down in case of any trouble.

Maximum Handling Ease and Operator Comfort

CRiSxt has been designed for maximum ease and comfort in configuration and handling. Detailed visualization allows for comfortable layout planning and system operation. The system is multilingual, platform independent, and provides for full functionality even without the use of PCs.
Local Support
Wherever You Need Us

Exyte Technology GmbH
Rosine-Starz-Str. 2-4
71272 Renningen
Germany
Phone +49 711 8804-8000
Email info@exyte-technology.net

Exyte Technology Shanghai Co., Ltd.
No. 139 Beimín Road,
Chedun, Songjiang
201611 Shanghai, China
Phone +86 21 37838560
Email info@exyte-technology.net

exyte-technology.net