

Online Monitoring System Software

BENEFITS

- Automate data-related tasks for timely information gathering and decision making
- Easily manage the large quantities of data inherent in continuous monitoring
- Gain a clear view of facility events for improved quality and system control
- Detect when parameters fall outside normal ranges and notify responsible parties for action
- Choose from software packages offering a variety of alarm configuration and notification methods for maximum flexibility

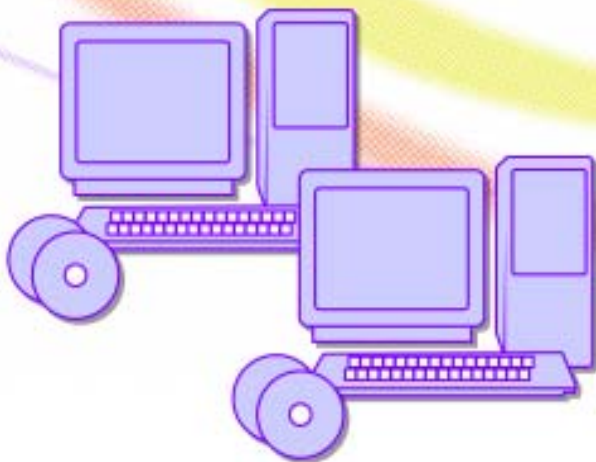
Find your fit: A wide range of software options addresses your automated monitoring requirements for your process or facility.

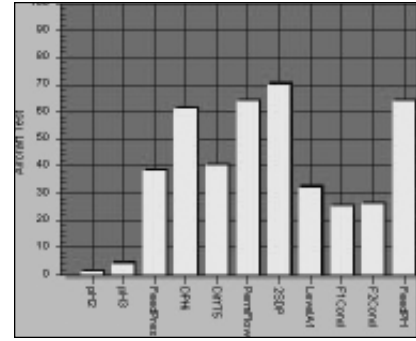
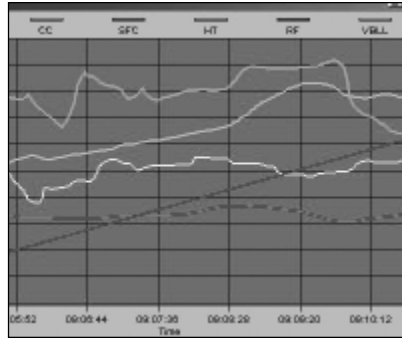
The right software turns the drudgery of manual data management into an automated process of reporting and informed decision-making. The large quantities of data resulting from extensive monitoring can be analyzed and converted through automated tasks into timely and accurate reports useful in determining facility status and control of a process or environment. Having a clear view of facility events, past and present, gives more control to the operator and better information for quality control and facilities engineering personnel.

Detecting when parameters fall outside the prescribed normal range and alerting responsible parties quickly keeps systems operating effectively and prevents long-term system degradation. Choices in how to configure alarms and notifications give operators flexibility and further control. Select from software packages offering visual and audible alarms, display changes on computer screens, email messages, and pager notifications.

Methods of collecting, storing and managing data vary from package to package. Depending on your regulatory, quality control, internal customer or external customer requirements, detailed historical analysis and report options can be configured for manual creation or automatic delivery.

Trying a software demonstration can help determine what works best for you. Contact our customer service department or your local agent for your complimentary demonstration CD.



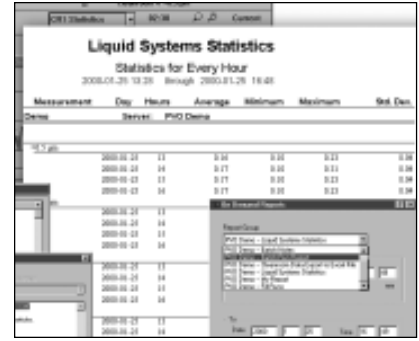
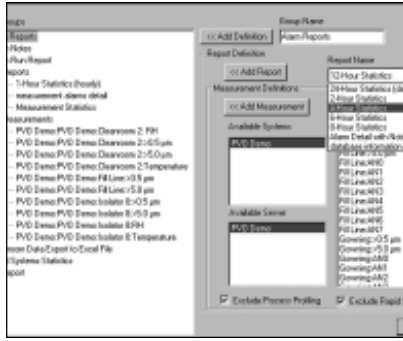
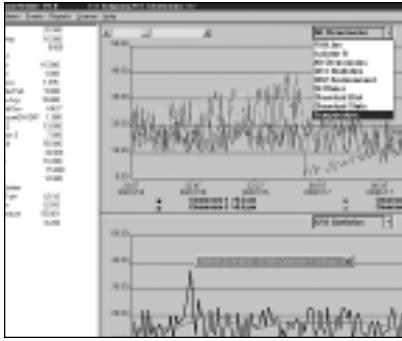


ULTRA VISION™ ONLINE

Transform data into accurate, consistent, and timely readings—information that you can use for process and control decisions. Collect data from a variety of physical and chemical parameters in a manufacturing process, in cleanrooms, or other critical areas. Specific applications include monitoring deionized water (DI) or ultrapure water (UPW) used for pharmaceutical or electronics manufacturing and verifying cleanliness levels of cleanrooms for compliance to ISO, FDA, or GMP standards. Ultra Vision Online simplifies complex monitoring to meet your needs every hour, every day of every year.

- Customized views on network nodes for optimal visibility
- Validation/documentation support tools that save time and money
- Historical data and reports for regulatory and quality requirements, including 21 CFR Part 11 compliance features
- Advanced alarm and condition notifications that can be customized; add-on software enables pager and email messages
- Connectivity to other monitoring or building management systems
- Flexibility to work with a combination of sequential, manifold and remote counters to take particle counting instrumentation one step further

FEATURE	Ultra Vision Online Basic	Ultra Vision Online Professional
21 CFR Part 11	—	✓
Validation support tools	—	✓
Facility maps	✓	✓
Email messaging	✓	✓
Network: real-time displays	—	—
Connect to other databases	✓	✓
Alarm limit lines on graphs	✓	✓
More than four pens on graph	✓	✓
Update manifold sequences	✓	✓
Number of sample points	350	4096
Number of instant graphs	Unlimited	Unlimited
Number of simultaneous graphs	Unlimited	Unlimited
Statistical measurement	✓	✓
Statistical alarms	✓	✓
Alarm delays	✓	✓
Manual entry measurement	✓	✓
Rapid storage	—	—
Process profiling control	—	—
Web-based client	—	—
Microsoft® Windows® operating system	✓	✓



PARTICLE VISION® ONLINE (PVO)

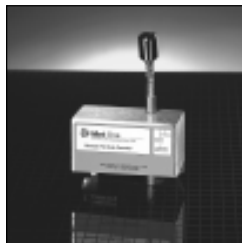
Designed specifically for interfacing with particle counters, PVO V2.0 reveals the current condition of your facility or process. Easy-to-learn and use, PVO reliably performs without sacrificing power or flexibility. Create descriptive names for each particle counter, customize the measurements, and control the organization of the measurement display depending on your needs.

PVO graphs data instantly; simultaneously view and scroll through 16 trends on a single clear display. Customizable report groups offer the flexibility of choosing which measurements and statistics to include. Create as many custom reports as needed.

- Simple, easy-to-use interface with superior graphing features
- User-expandable system makes it easy to add more particle counters, measurements, custom reports and computers
- DDE permits use of third-party environmental sensors, control signals, and alarm lights/sirens
- Smart Monitoring enables the data storage rate to automatically adjust—keep in step with your process monitoring
- Full relational database management system: Sybase Adaptive Server Anywhere™ and full built-in report capabilities using Crystal Reports™
- Automatic data backup and archive while sampling

Ultra Vision Online Remote Access 5	Ultra Vision Online Remote Access Unlimited	Particle Vision Online Standard
✓	✓	—
✓	✓	—
✓	✓	Option: Mirage
✓	✓	—
✓	✓	—
✓	✓	—
✓	✓	✓
✓	✓	—
✓	✓	—
4096	4096	Unlimited
Unlimited	Unlimited	Unlimited
Unlimited	Unlimited	✓
✓	✓	✓
✓	✓	✓
✓	✓	✓
✓	✓	✓
—	—	✓
—	—	✓
Option	Option	✓
✓	✓	✓

Parameters measured for a complete system



ANATEL® TOTAL ORGANIC CARBON ANALYZERS

Monitoring TOC (Total Organic Carbon) indicates the purity of water produced and used for pharmaceutical and electronic manufacturing. Check various points throughout a water system for troubleshooting and diagnostics of deionized water (DI), ultrapure water (UPW), or water for injection (WFI). TOC analyzers allow convenient system suitability testing as required by TOC methods <643> and EP2.2.44 from which results can be calculated and formatted into regulatory reports.

HIAC AND ANATEL LIQUID PARTICLE COUNTERS

Detecting particles in liquids provides information essential in assuring the quality of a product or detecting potentially catastrophic failures in process or mechanical systems. HIAC systems monitor high purity water systems and cleaning systems used to process medical devices. Anatel Ultrapure Laser Particle Counters measure small particles in significantly low particle concentrations, ideal for high-end electronics manufacturing.

MET ONE AIRBORNE PARTICLE COUNTERS

Taking samples and monitoring particles continuously builds confidence in knowing that critical environments meet your regulatory or specified requirements. Met One Air Particle Counters offer two methods superior to random sampling. Sequential sampling uses a single central counter and a manifold system to take counts from the same position every time, eliminating the ambiguous human error factor. Continuous sampling through remote airborne counters, improves the likelihood of recording transient contamination particle events.

ORBISPHERE® GAS ANALYZERS

Measuring dissolved gases accurately and controlling their levels can prove critical to the quality of the end product. Operators can quickly and easily obtain accurate measurements to monitor and control processes in industries as diverse as the beverage, water treatment, semiconductor, chemical, pharmaceutical, and biotechnology industries. Orbisphere's patented electrochemical cell (polarographic) technologies for measuring dissolved gases, including residual levels of oxygen and ozone, are widely recognized as the most accurate and precise available.



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