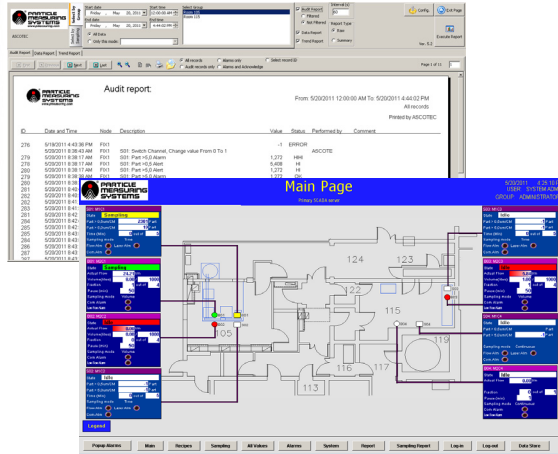


FacilityPro™

Environmental Monitoring System



BENEFITS

- Modular hardware design for flexibility and simple upgrades
- Industrial automation architecture for robustness
- GE Proficy iFix-based SCADA software package
- 19" rack configuration for quick installation
- Automated sampling/batch control
- 21 CFR Part 11-compliant data storage and reporting
- E-signatures

APPLICATIONS

- Particle count monitoring
- Microbial sampling (media plates and RMM)
- Differential pressure, temperature, relative humidity, airflow velocity, and other analog environmental monitoring

FacilityPro is the central equipment hub for an environmental monitoring system. The modular design incorporates processor and power modules and a combination of particle sensors, microbial collection instruments, and analog/digital I/O modules, all in a standard 19" rack.

This flexible system can be configured to your specific monitoring requirements, housing and controlling your monitoring instruments in one central location. Each monitoring module provides necessary vacuum and/or power to the sample points. As your monitoring needs change, additional modules can be added to meet your new requirements.

True to traditional industrial automation architecture, the FacilityPro Processor Module acts as the control system. It receives all sensor inputs, consolidates and analyzes environmental data, and manages alarm triggers and outputs.

FacilityPro SCADA, based on GE Proficy iFix, provides the supervisory control, including the graphical operator interface, system configuration, audit trails, and data/trend reports.



FacilityPro™

Environmental Monitoring System

specifications

Processor Module

The Processor Module is the brains of the FacilityPro system. With a panel PC running Windows XP Embedded, this module processes the sensor data, triggers alarms, manages all I/O, and provides all of the required information to the FacilityPro SCADA for display.

When used in a central vacuum system architecture, the Processor Module will monitor vacuum pressure in each of the sensor modules and control the vacuum pumps.

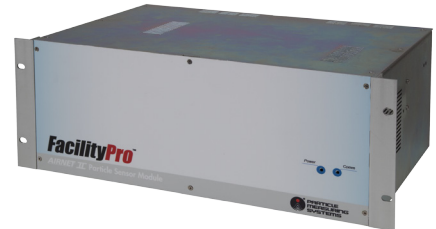


Display	6.5 in TFT LCD with resistive touchscreen
Processor	AMD Geode LX800 (500 MHz)
Operating System	Windows XP Embedded
Dimensions (l, w, h)	13.3 in x 19.0 in x 8.75 in (33.8 x 48.2 x 22.2 cm), 5U rack height
Weight	44 lb (20 kg)
Power	100 – 240 VAC, 50 – 60 Hz, 600 W
Operating Environment	Temp: 41 – 104 °F (4 – 40 °C); non-condensing humidity

Airnet® II Module

The Airnet II Module controls up to 8 Airnet II particle sensors. The built-in vacuum manifold and Power over Ethernet switch provide the power, vacuum and communications to connected sensors.

The Airnet II Module also includes 8 relay outputs for alarm notification.



Dimensions (l, w, h)	13.8 in x 19.0 in x 7.0 in (35.1 x 48.3 x 17.8 cm), 4U rack height
Weight	40.0 lb (18.1 kg)
Power	100 – 240 VAC, 50 – 60 Hz, 240 W
Operating Environment	Temp: 41–104 °F (4 – 40 °C); non-condensing humidity

FacilityPro™

Environmental Monitoring System

specifications

BioCapt™ Module

The BioCapt Module includes a built-in vacuum manifold and vacuum pressure sensors to allow for full control of up to 8 BioCapt microbial sampling heads.



Dimensions (l, w, h)	11.6 in x 19.0 in x 5.25 in (29.5 x 48.3 x 13.3 cm), 3U rack height
Weight	30.0 lb (13.6 kg)
Operating Environment	Temp: 41 – 104 °F (4 – 40 °C); non-condensing humidity

I/O Module

The I/O module accepts 8 digital inputs, 16 relay outputs, and an optional 24 analog inputs for connection to environmental sensors. The module provides all necessary power to the connected devices.



Ideal for integration of critical temperature, relative humidity, differential pressure, airflow velocity, auditory and/or visual alarm devices

Dimensions (l, w, h)	12.0 in x 19.0 in x 7.0 in (30.5 x 48.3 x 17.8 cm), 4U rack height
Weight	27.5 lb (12.5 kg)
Inputs/Outputs	100 – 240 VAC, 50 – 60 Hz, 240 W
Operating Environment	Temp: 41 – 104 °F (4 – 40 °C); non-condensing humidity
Inputs/Outputs	16 relay or digital outputs (configurable) 8 digital inputs 24 0-10 VDC or 4-20 mA analog inputs (optional)

Power Module

The Power Module connects to both 3-phase AC and 1-phase AC power and supplies the required power to vacuum pumps (up to 4 maximum) and other FacilityPro modules.



Dimensions (l, w, h)	14.0 in x 19.0 in x 5.25 in (35.6 x 48.3 x 13.3 cm), 3U rack height
Weight	15.5 lb (7.0 kg)
Power	460 – 480 VAC 3-phase, 50 – 60 Hz and 100 – 240 VAC, 50 – 60 Hz
Operating Environment	Temp: 41–104 °F (4 – 40 °C); non-condensing humidity

FacilityPro™

Environmental Monitoring System

FacilityPro SCADA

FacilityPro SCADA software provides the interface and supervisory control for the FacilityPro Environmental Monitoring System. The SCADA software allows operators and supervisors to see the current status of environmental monitoring sensors, start and stop particle and microbial sampling, and acknowledge alarms.

Quality managers can easily set the alarm limits and other parameters within the software to meet their environmental monitoring program requirements and generate reports for batch release.

Based on GE Proficy iFix, FacilityPro SCADA is built upon a proven platform with solid security and stability, yet is flexible with highly-configurable displays to meet application-specific needs.

Reports

FacilityPro SCADA includes a robust report generator that can create various reports for batch release and excursion troubleshooting. All reports can be filtered based on date/time, batch number, and many other configurable parameters. Data reports give insight into the state of the environment during a process.

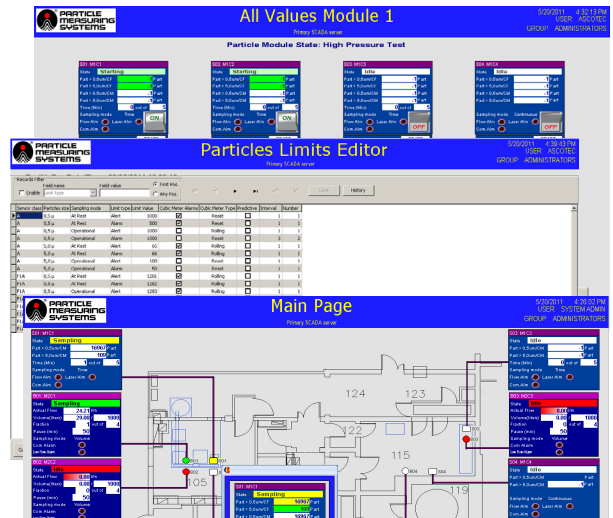
Audit reports provide a view of changes, alarm acknowledgement, and E-signatures.

Trend reports deliver a 2D or 3D image of process data for easy visual analysis.

Security and 21 CFR Part 11

FacilityPro SCADA was designed with 21 CFR Part 11 requirements in mind. All data is stored in a secure unmodifiable database.

Every user is given their own username and password. User authentication can be completed against a local database or a corporate Microsoft Active Directory server.



specifications

Minimum requirements

2.0 GHz Dual-Core CPU, 2 GB RAM. 3.0 GHz Dual-Core CPU, \geq 4 GB RAM recommended

Operating Systems

Windows XP SP3, Windows Server 2003 32-bit

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