

COMDAS™
Continuous Opacity Monitoring
Data Acquisition System



About COMDAS™...

A Complete Solution

COMDAS is a cost-effective Data Acquisition System for use with Continuous Opacity Monitoring Systems (COMS). COMDAS couples Monitoring Solutions' CEMCON™ PLC controller and the CEMDAS™ software package to offer a user-friendly Windows-based system for monitoring, recording, and reporting stack opacity emission information. COMDAS offers an inexpensive alternative to chart recorders and manual reporting. It can be added to most existing COM Systems as an upgrade.

Intuitive Ease of Use

CEMDAS software is written in Visual Basic for the Windows operating system and utilizes common commands, screens and tools that most users are familiar with and use everyday. CEMDAS software cuts training time by utilizing a simple and easy to follow pull-down menu structure.

CEMCON Controller

COMDAS uses Monitoring Solutions' CEMCON PLC controller system which utilizes the GE Fanuc 90-30 PLC. CEMCON is delivered completely configured to meet each customer's individual needs.



Besides the I/O utilized by the CEMDAS software for monitoring and reporting functions, a number of other I/O is available including any number of: Digital Inputs, Digital Outputs, Analog Inputs and Analog Outputs. Utilizing these optional I/O modules, a user can customize their COMDAS to include a variety of plant monitoring and control functions as needed.

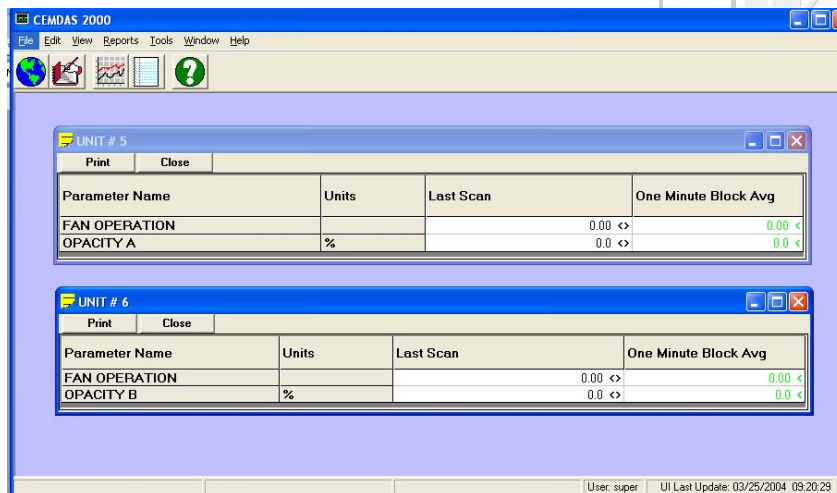
COMDAS PC Hardware

COMDAS packages come with a powerful state-of the art PC which is coupled with the PLC to complete the hardware package. The PC utilizes a high speed CPU with dual large hard drives (one for backup), and a CD-RW for data archiving. A large monitor, modem, and integrated Ethernet card round out the PC package. All the software is pre-loaded and configured.



Pre-Configured CEMDAS Software

COMDAS systems come completely configured for each individual user. Total cost of ownership is reduced through CEMDAS software's highly configurable design. Monitoring Solutions is able to provide cost-effective upgrades and



modifications when user needs and requirements change.

CEMDAS software is also designed to be easily upgraded and supported as EPA regulations change. This means never getting caught with an old version that's expensive to upgrade or must be replaced to meet new requirements. Its unique software design allows quick upgrades to all CEMDAS customers in the shortest amount of time – regardless of the uniqueness of each user's application.

Powerful Reporting

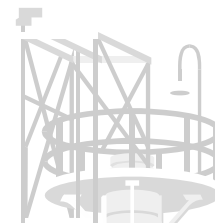
Pre-configured reports are guaranteed to meet EPA and local regulation requirements. Reports can be generated automatically or manually, and sent to a printer, the screen, or a disk file. Available reports include minute, hourly, daily opacity, daily alarm, monthly and quarterly reports.

Besides the standard reporting features, CEMDAS software is packed with additional features designed to allow a user to better diagnose and understand their CEMS system. Some of the features include:

- Trending
- System Activity Logs
- Alarm Logs
- Screen Reports
- And more...

Guaranteed...

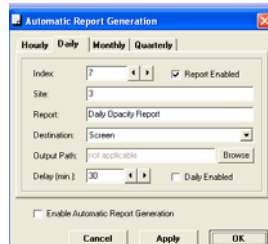
Monitoring all opacity System operating parameters, COMDAS provides a powerful tool for the collection of real time data, and the report generation necessary to comply with Federal, State, and Local requirements. COMDAS is **guaranteed** to provide all of the reports needed for meeting the requirements of your air permit.



Automated Utilities



In addition to automatic report generation, CEMDAS software includes automated database backup. This insures critical data is never lost.



Downtime Recovery

Because missing data due to computer or communication failures can be very expensive, Monitoring Solutions offers a Downtime Recovery option for COMDAS. Utilizing a data storage module in the PLC allows it to continue collecting and storing data in the event of a COMDAS computer or communications link failure. After the failure is repaired, recovery of the data from the PLC can be made in a few simple steps.



Security

Using advanced security features, CEMDAS software can be configured for various user levels. The entire menu is password protected down to individual menu items. A user can select which users may access the system and what commands and functions will be available to that user. This insures only those who are authorized can make changes to, or access the system.



Upgrade for Existing Systems

COMDAS will work with nearly any COM System on the market today. Upgrading to COMDAS is an inexpensive way to modernize an older COMS data collection and reporting system.

Service and Support

Monitoring Solutions Service Representatives stand behind the COMDAS System offering world-class service, training and support. Packages can be provided offering a variety of support levels depending on the needs of each individual user.

Remote Support

One way to keep costs associated with service and maintenance of a COMDAS system is the remote support feature. All COMDAS systems include modems and software that allow remote control and monitoring of the system. Remote support allows a Monitoring Solutions Service Engineer to quickly troubleshoot, diagnose and support the COMDAS system without a site visit.

CEMDAS Software Service Contract

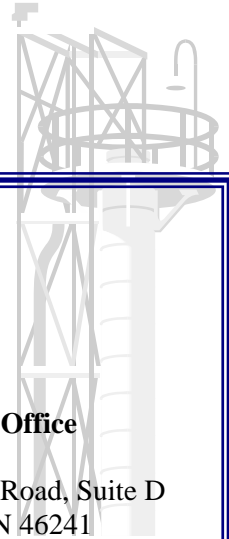
A Service Contract with Monitoring Solutions means the ultimate in priority support and customer response. Some of the advantages a Service Contract can offer include:

- **Operation & Maintenance Support** - Monitoring Solutions will provide unlimited telephone and modem support during Monitoring Solutions' normal business hours to answer questions relating to the operation and maintenance of a CEMDAS system.
- **24/7 Emergency Telephone & Modem Support** - Unlimited telephone and modem support for any emergencies that occur during or outside of Monitoring Solutions' normal business hours.
- **Guaranteed On-Site Response Time** - A Monitoring Solution's Service Engineer will be on-site within 48 hours of determination that on-site support is required.
- **Defect Repair** - Monitoring Solutions will correct any CEMDAS/CEMCON software defects discovered at no charge.
- **Version Upgrades** - Support Contract customers receive available software version upgrades containing functionality and performance enhancements at no cost during the term of the contract.
- **CEMDAS Training** - Once per year a customer may elect to have a Software Engineer visit the site and conduct a refresher course (2-3 hours) on the Operation and Maintenance of the CEMDAS System.
- **Field Service Discount** - Customers receive a substantial discount on Software Engineer travel rates.

Opacity Support Contract

Monitoring Solutions can also offer Support Contracts for your Opacity equipment including the following:

- **Operation & Maintenance Support** - Monitoring Solutions will provide 24/7 unlimited telephone support to answer questions relating to the operation and maintenance of a COMS system.
- **Quarterly Preventive Maintenance** - A Monitoring Solutions' Service Engineer will visit your site quarterly and perform comprehensive preventive maintenance on your Opacity System Equipment
- **Guaranteed Emergency Support** - A Monitoring Solutions Service Engineer will be on-site within 24 hours of the determination that on-site support is required to resolve the problem.
- **Quarterly Opacity Monitor Performance Audits** - In conjunction with quarterly preventive maintenance visits, Monitoring Solutions will prepare the opacity monitors and perform Quarterly Performance Audits in accordance with 40 CFR Part 60. A written report will be submitted within 10 business days from completion of the audits.
- **Priority Support**
- **Emergency Parts Shipment**
- **Field Service Discount** - Customers receive a substantial discount on Software Engineer travel rates.



***For additional information contact
Monitoring Solutions at...***

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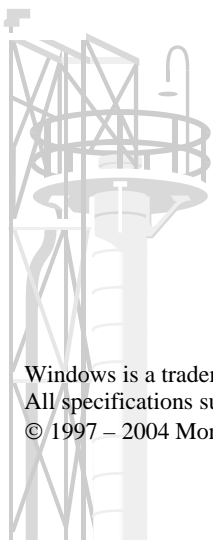
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