

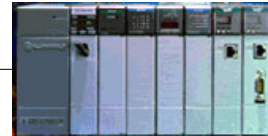
# EMC Station Manager<sup>®</sup>

## CEM Data Logger – Data Acquisition System

### Data Acquisition System (DAS) Continuous Emission Monitoring (CEM)



Station Manager CEM Data Logger PC



Allen-Bradley SLC-500 PLC  
(or other PLCs & I/O Devices)

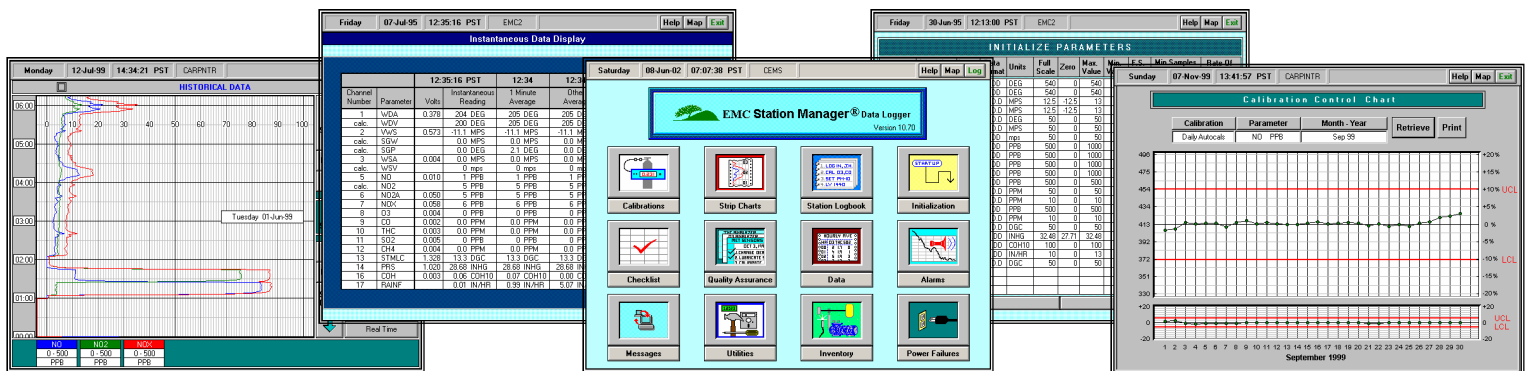
### Key Features

- Integrated CEM Data Logger, Data Handling System, and Reporting System
- Intuitive User Interface
- Data Reporting - 40 CFR Part 60 and 40 CFR Part 75
- Allen-Bradley PLC, Automation Direct PLC, Modicon PLC, or Advantech SIU
- Modbus “Master” and “Slave” Interfaces to Plant DCS and SCADA Systems
- Data Inputs from Wonderware, Microsoft SQL Server, or Oracle databases
- Strip Charts and Trend Recording
- Timer – Controller Program
- Calibration Control – Logbook – Inventory – Alarms
- Data Export to Microsoft Excel Spreadsheets
- Microsoft Windows 2000
- Voice Alarm Message
- E-Mail Alarm and Report Program
- Real-Time Data Display

NEW

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# EMC Station Manager® CEM Data Logger – Data Acquisition System

## Specifications

- **Station Manager PC:** Low Cost Dell, Gateway, IBM, or HP PC, or Industrial Rack-Mount PC.
- **PC Specifications:** 2.0 GHz Celeron, 128 MB RAM, 40 GB Drive, CD-ROM, 15" Monitor, Microsoft Windows 2000
- **Hardware I/O Devices:** PLCs, Advantech "ADAM" Signal Interface Units (SIUs), and Direct Serial Interface to Analyzers
- **PLCs Supported:** Allen-Bradley, Automation Direct, Modicon, and other PLCs
- **PLC Interface:** RS-232C and Ethernet (TCP-IP)
- **ADAM SIU Interface:** RS-232C, RS-485C, or Ethernet (TCP-IP)
- **ADAM 4-Slot SIU Dimensions:** 9.3" L x 4.3" W x 2.9" H (231mm x 110mm x 75mm), 1.7 lbs (3.7 kg)
- **ADAM 8-Slot SIU Dimensions:** 13.9" L x 4.3" W x 2.9" H (355mm x 110mm x 75mm), 2.6 lbs (5.7 kg)
- **Analyzer Interface:** Voltage, Current Loop, and RS-232C
- **Analog Signal Resolution:** 16-Bit Analog to Digital (A/D) Converter
- **Analog Inputs:** 8, 16, 24, or 32 Differential Analog Inputs (Voltage: 0-1, 0-5, 0-10 vdc Current: 0-20 ma or 4-20 ma)
- **Digital Inputs:** 8, 16, 24, or 32 Optically Isolated Digital Inputs
- **Relay Outputs:** 8, 16, 24, or 32 Relay Outputs

## Call Factory For Further Information

Parameter	Unit	Min	Max	Avg	Std Dev
CO	ppm	10	15	12	2
SO <sub>2</sub>	ppm	5	10	7	1
NO	ppm	1	2	1.5	0.5
NO <sub>2</sub>	ppm	0.5	1	0.7	0.2
PM <sub>10</sub>	µg/m <sup>3</sup>	100	200	150	30
PM <sub>2.5</sub>	µg/m <sup>3</sup>	50	100	75	15
Temp	°F	60	80	70	10
Humidity	%	30	70	50	15
Wind Speed	mph	0	15	5	3
Wind Dir	°	0	360	180	90
Pressure	inHg	29.5	30.5	30.0	0.1
Acid Rain	pH	4.0	6.0	5.0	0.5

Parameter	Device	Calibration	Unit	Min	Max	Avg	Std Dev
CO	SIU	Cal	ppm	10	15	12	2
SO <sub>2</sub>	SIU	Cal	ppm	5	10	7	1
NO	SIU	Cal	ppm	1	2	1.5	0.5
NO <sub>2</sub>	SIU	Cal	ppm	0.5	1	0.7	0.2
PM <sub>10</sub>	SIU	Cal	µg/m <sup>3</sup>	100	200	150	30
PM <sub>2.5</sub>	SIU	Cal	µg/m <sup>3</sup>	50	100	75	15
Temp	SIU	Cal	°F	60	80	70	10
Humidity	SIU	Cal	%	30	70	50	15
Wind Speed	SIU	Cal	mph	0	15	5	3
Wind Dir	SIU	Cal	°	0	360	180	90
Pressure	SIU	Cal	inHg	29.5	30.5	30.0	0.1
Acid Rain	SIU	Cal	pH	4.0	6.0	5.0	0.5

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg	Max	Min
CO	12	15	10	18	14	11	13	16	12	17	14	15	13	16	14	15	12
SO <sub>2</sub>	8	10	7	12	9	6	8	11	7	10	8	9	7	10	8	9	6
NO	5	6	4	7	5	3	4	6	4	5	4	6	3	5	4	5	3
NO <sub>2</sub>	3	4	2	5	3	1	2	4	2	3	2	4	1	3	2	3	1
PM <sub>10</sub>	150	200	120	250	180	100	160	220	140	280	190	170	130	210	170	250	100
PM <sub>2.5</sub>	75	100	60	125	90	50	80	110	70	140	95	85	65	105	85	125	50
Temp	65	75	60	85	70	55	65	80	60	90	75	80	65	85	70	85	55
Humidity	40	60	30	80	50	20	40	70	30	90	40	50	30	80	40	90	20
Wind Speed	2	5	1	10	3	0	2	8	1	12	4	6	1	10	4	12	0
Wind Dir	180	270	90	0	180	270	90	0	180	270	90	0	180	270	90	0	180
Pressure	30.0	29.8	30.2	29.9	30.1	29.7	30.3	29.8	30.0	29.6	30.4	29.9	30.1	29.7	30.2	29.6	30.5
Acid Rain	5.0	4.5	5.5	4.8	5.2	4.2	5.8	4.6	5.4	4.4	5.6	4.3	5.7	4.5	5.3	4.1	5.9

Station	Unit	Quarter	Exceedance	Compliance
Station 1	SIU	Q1 2003	15	95%
Station 2	SIU	Q1 2003	10	98%
Station 3	SIU	Q1 2003	8	99%
Station 4	SIU	Q1 2003	12	97%
Station 5	SIU	Q1 2003	9	98%
Station 6	SIU	Q1 2003	11	97%
Station 7	SIU	Q1 2003	7	99%
Station 8	SIU	Q1 2003	13	96%
Station 9	SIU	Q1 2003	6	99%
Station 10	SIU	Q1 2003	14	95%
Station 11	SIU	Q1 2003	5	99%
Station 12	SIU	Q1 2003	16	94%
Station 13	SIU	Q1 2003	4	99%
Station 14	SIU	Q1 2003	17	93%
Station 15	SIU	Q1 2003	3	99%
Station 16	SIU	Q1 2003	18	92%
Station 17	SIU	Q1 2003	2	99%
Station 18	SIU	Q1 2003	19	91%
Station 19	SIU	Q1 2003	1	99%
Station 20	SIU	Q1 2003	20	90%
Station 21	SIU	Q1 2003	0	100%
Station 22	SIU	Q1 2003	21	89%
Station 23	SIU	Q1 2003	0	100%
Station 24	SIU	Q1 2003	22	88%
Station 25	SIU	Q1 2003	0	100%
Station 26	SIU	Q1 2003	23	87%
Station 27	SIU	Q1 2003	0	100%
Station 28	SIU	Q1 2003	24	86%
Station 29	SIU	Q1 2003	0	100%
Station 30	SIU	Q1 2003	25	85%
Station 31	SIU	Q1 2003	0	100%
Station 32	SIU	Q1 2003	26	84%
Station 33	SIU	Q1 2003	0	100%
Station 34	SIU	Q1 2003	27	83%
Station 35	SIU	Q1 2003	0	100%
Station 36	SIU	Q1 2003	28	82%
Station 37	SIU	Q1 2003	0	100%
Station 38	SIU	Q1 2003	29	81%
Station 39	SIU	Q1 2003	0	100%
Station 40	SIU	Q1 2003	30	80%
Station 41	SIU	Q1 2003	0	100%
Station 42	SIU	Q1 2003	31	79%
Station 43	SIU	Q1 2003	0	100%
Station 44	SIU	Q1 2003	32	78%
Station 45	SIU	Q1 2003	0	100%
Station 46	SIU	Q1 2003	33	77%
Station 47	SIU	Q1 2003	0	100%
Station 48	SIU	Q1 2003	34	76%
Station 49	SIU	Q1 2003	0	100%
Station 50	SIU	Q1 2003	35	75%

## CEM Data Reports



## Hardware I/O Devices

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