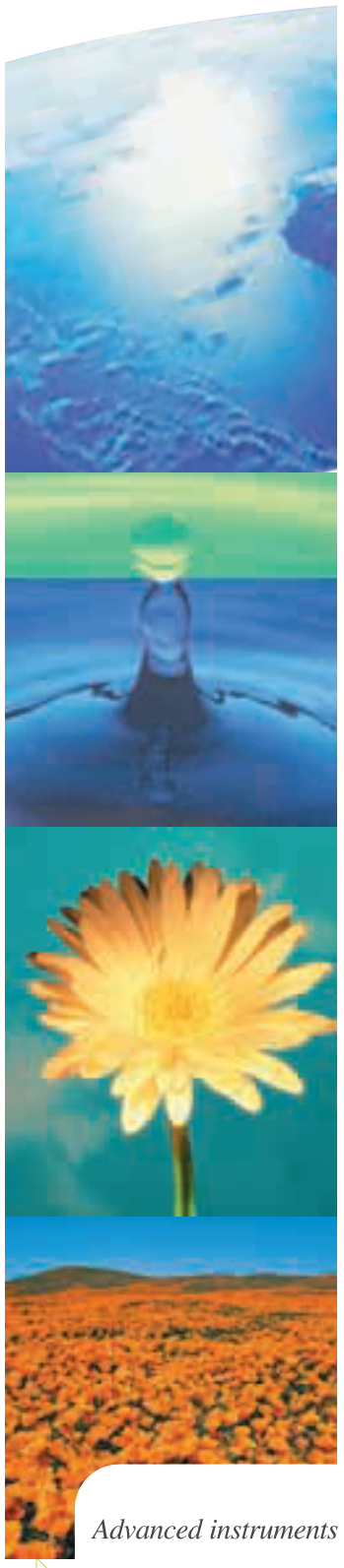
HORIBA

XE



Model XE
Multi-gas CEMS instrument

The Horiba Model XE is the most advanced instrument available for Continuous Emissions Monitoring (CEM) applications. The instrument combines gas analysis, I/O for system control and alarms, data storage, diagnostics and a simple user interface in a single, compact case. The front panel multi-line LCD display is menu driven, allowing the user to easily view a series of screens showing gas concentrations, calibration information and operation mode. The instrument also incorporates a 486 microprocessor and four megabytes of memory. Extra memory is provided when the optional data storage capability is added. The standard program allows user configuration and control of system functions by selections in look-up tables.

features

- No routine maintenance required.
- Reliable, accurate measurement with accepted methods including NDIR, chemiluminescence, ultraviolet, and magnetopneumatic technology.
- Simple operation with operator prompts and HELP menu on each screen.
- Menu-driven displays guide the operator through set up, configuration, calibration, operation and maintenance functions.
- High reliability is assured with monitoring of up to 16 alarms, system diagnostics and optional data storage.
- Measurement ranges are easily changed in the field using the front panel keys.
- Modular design means analyzer modules can be replaced in minutes or added in the future to provide additional gas measurements.
- Accepts analog or digital inputs and controls external devices such as opacity and flow monitors and other instruments to provide common control and reporting.
- Requires minimum rack space for mounting (just 5 1/4 inches high).
- Rugged, reliable and virtually unaffected by external Ònoise Ó.
- Built-in security limits system entry.
- Optional data storage capability for seven to 30+ days of data, depending on gases monitored and external devices controlled.
- Manufactured under strict ISO 9001 certification.

Advanced instruments to foster a cleaner environment for future generations.

Model XE Multi-gas CEMS instrument

The Model XE multi-gas CEMS instrument incorporates gas measurement and system control in a single compact case. The instrument eliminates redundant components that are usually included in CEM systems, resulting in reduced maintenance requirements and fewer spare parts.

A 486 micro-processor provides system control, diagnostics, data storage and monitoring of internal/external alarms (optional).

Easy to use menus allow the operator to configure the analyzer without a manual. Operator screens show raw and corrected gas concentrations, calibration drift and offsets as well as values for external devices and alarms. Supervisor screens allow configuration of calibration information, probe blowback timing, range change parameters and allows assignment security ID and alarm levels.

Technology proven in thousands of installations is used for all gas measurements: non-dispersive infrared, ultraviolet, chemiluminescence, and magnetopneumatic technology.

No routine maintenance. Horiba's unique cross-flow modulated non-dispersive infrared (NDIR) technology doesn't require an optical chopper to modulate the detector output, eliminating the need for optical alignment and resulting in improved signal-to-noise ratio. Zero drift is negligible because compensation for source drift, window fogging, or deposits on the cell walls is automatic and complete. Optical alignment is never required.

Sensitivity is enhanced because of the improved signal-to-noise ratio, allowing cell lengths to be shorter than ever before.

Built-in flexibility is provided by the modular design of the instrument, allowing rapid field replacement or addition of analyzer modules. All variable control parameters including I/O configurations and ranges can be easily changed in the field using the front panel menus. Extensive communication capability includes two high-speed RS-422 or RS-232 ports for bi-directional communication with a computer and 16 channels of analog output for recording any parameters measured. External analyzers can be easily added to the system. The I/O capability and software configuration can control calibrations and monitor alarms from THC, NH3, opacity and flow monitors and in-situ oxygen analyzers.

Represented by:

specifications

XE

Measured Components:	One to five of the following gases: NO_x, SO_2, CO, CO_2, and O_2
Ranges Available:	
NO_x:	0-100 / 5,000 ppm
CO:	0-50 / 5,000 ppm, standard or 0-10 / 1,000 ppm,optional
SO_2:	0-50 / 5,000 ppm
NO_x: (CLD option)	0-10 / 5,000 ppm
SO_2: (UV option)	0-10 / 5,000 ppm
CO_2:	0-5 / 50%
O_2:	0-10 / 25%
Repeatability:	
Ranges ≧ 200 ppm:	± 0.5% of full scale
Ranges ″ 200 ppm and O_2 analyzer:	± 1.0% of full scale
Response Time:	
NO_x, CO, and CO_2:	15 seconds for 90% response
SO_2 and O_2:	30 seconds for 90% response
Drift:	With ambient temperature within ±10¼F (5¼C):
Zero Drift:	
Ranges > 200 ppm	± 1.0% of full scale / 7 days
Ranges < 200 ppm	± 2.0% of full scale / 7 days
Span Drift:	± 2.0% of full scale / 7 days
Linearity:	± 1.0% of full scale
Interference:	<± 2.0% of full scale for standard sample gas conditions
Power Requirements:	115 V ac, 50/60 Hz
Power Consumption:	300 VA for base configuration 600 VA for configuration with UV SO_2 or CLD NO_x options.
Sample Gas Flow Rate:	0.5 <pm
Sample Gas Pressure:	4.9 kPa (500 mmAq) ± 0.5%
Outputs:	0-16 mA or 4-20 mA and 0-1 V dc isolated outputs for up to 16 channels and 64 discrete digital outputs available (all user selectable from list of available outputs)
Inputs:	13 channels of analog 4 to 20 mA or 0-1 V dc and 8 discrete digital inputs standard, expandable as required.
Materials Exposed to Sample Gas:	304 stainless steel, Teflon™, polypropylene, fluororubber, PVC, and glass
Display:	320 x 240 dot matrix LCD
Dimensions:	
Height:	5 1/4 in (134 mm)
Width:	19 in (483 mm)
Length:	22 in (559 mm)
Weight:	Approx. 36 lb (16.3 kg)

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Bulletin XEDS5M6-01, Printed in U.S.A.

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