

Steri-Trac[®] Toxic Gas Monitoring System Product Specifications

Ethylene Oxide

Hydrogen Peroxide

Ozone



Area Monitor

- Micro-processor controlled gas detection instrument. In a multi-gas, multi-monitor situation, eliminates potential for single-point-of-failure
- Continuously monitors gas concentrations in a given area, 10' radius
- Reports gas concentration in 0.1 parts per million (ppm) for Ethylene Oxide and Hydrogen Peroxide, 0.02 ppm for Ozone
- Large Tri-color LED display (Green, Yellow, Red) with RS485 digital communications
- 2 user-adjustable alarm settings with simultaneous audible and visual alarms
- Meets OSHA Permissible Exposure Limit (PEL), Excursion Limit (EL) and Action Level (AL) requirements
- Wall mounted, requires 110 VAC
- Two external contact relays available
- Sample draw allows for EPA emissions regulation of <1 ppm over 24 hour



Sensor Module

- In conjunction with remote sensor, certified for intrinsically safe applications Class 1, Division 1, Zone 0
- Electrochemical sensor, currently available for ethylene oxide, hydrogen peroxide and ozone
- Patented Spot-On chemical filter addresses cross-sensitivity issues commonly associated with low levels of common background interferents, such as alcohols and carbon monoxide
- Sensors calibrated at ChemDAQ's factory and provided at 4 month intervals under Sensor Exchange/Calibration Program, eliminate cost and labor associated with on-site calibration



Remote Display

- Wall mounted outside of monitored areas to alert personnel of gas levels "prior to" entry
- Duplicates information received from the area monitor, including audible and visual alarms
- Physically attached via signal cable to a companion area monitor
- Receives its power from the area monitor



Remote Sensor/Barrier Unit

- Used when exposure area is not near the wall mounted area monitor
- Mounted near the source of exposure in intrinsically safe applications
- Mounted near the source of combustion in LEL applications
- Barrier Unit provides an intrinsically safe circuit and power to remote sensor
- Physically attached via signal cable to area monitor



Data Acquisition Computer (DAQ)

- Continuously and simultaneously tracks gas concentrations from up to 8 area monitors
- Centrally calculates OSHA Permissible Exposure Limit (PEL), Excursion Limit (EL) and Action Level (AL) for each specific gas in each area being monitored
- Centrally calculates EPA emissions over 24 hour daily average
- Provides “*impending alerts*” to warn if a hazardous level is approaching or a deviation level (in the case of emissions monitoring)
- Meets OSHA 30 year record keeping requirements
- Meets EPA record keeping requirements
- Touch screen with color-coded graphic display
- Automatically backs-up and stores exposure data
- Dedicated system, does not communicate over customer LAN, password protected
- Ability to recall data on screen, print or extract to local CSV file
- Includes CPU, touch screen monitor, RS485 multi-port card, color printer, keyboard and UPS



Remote Video Display (RVD)

- Duplicates all graphics and alarms from DAQ for mounting in general work areas where visibility of monitors and/or DAQ might be an option
- Direct connected to DAQ via audio and video cable

TECHNICAL SPECIFICATIONS

CERTIFICATIONS:	Safety: UL 61010-1/CSA 22.2 Intrinsically Safe: Certified for Class 1, Division 1, Group C and D, Class 1, Zone 0		
OSHA COMPLIANCE	Permissible Exposure Limit (PEL), Excursion Limit (EL), Action Level (AL) 30-year record keeping required for exposure data		
SENSOR PRINCIPLE:	Electrochemical (ppm), Infra-red (LEL)		
	Ethylene Oxide	Hydrogen Peroxide	Ozone
RESOLUTION (ppm):	0.1 ppm	0.1 ppm	0.02 ppm
SENSOR RANGE:	0 – 50 ppm	0 – 10 ppm	0 – 5 ppm
RESPONSE TIME	< 140 sec (T ₉₀)	< 150 sec (T ₉₀)	< 150 sec (T ₉₀)
TEMPERATURE/HUMIDITY:	-20 to +50° C 15 to 95% non-condensing	0 to + 50° C 15 to 95% non-condensing	-20 to + 50° C 15 to 95% non-condensing
DISPLAY:	Tri-color, 4 digit, 1.25”, 5 x 8 Matrix LED		
ALARMS:	2 - User Adjustable alarm levels, HIGH and LOW		
OUTPUT:	Linear		
EXTERNAL CONTACT RELAYS:	2 Relays, Open/Closed Available		
CALIBRATION INTERVALS:	4 months (factory calibrated)		
PHYSICAL DIMENSIONS (Monitor)	10” width x 6” height x 5” depth, 2.5 pounds		
INSTALLATION REQUIREMENTS:	Wall mounted, 110 VAC, 1 amp		
COMMUNICATIONS:	Digital RS485		
DAQ OPERATING SYSTEM:	Windows XP, ChemDAQ proprietary software		
DAQ FEATURES:	Automatic data back-up in removable storage, Reporting capabilities, Export to csv		
DAQ VISUAL ALARM INDICATOR:	Color coded – Green: OK conditions, Yellow: Impending alert, Red: Alarm		
# MONITORS SUPPORTED:	8 per DAQ		