

Solutions for Environmental Monitoring, Safety and Compliance

Real-time Process and Laboratory Analyzers for Air and Water Applications



Fuel Gas, Natural Gas & Biofuels

Applications:

- Real-time gas analyzers for environmental compliance and combustion control
- Rapid response for optimized combustion efficiency and accurate H₂ blending to reduced carbon emissions
- Multiple solutions for compliance with regulations such as 40 CFR Part 60, and HRVOC rules
- H₂S, Total Sulfur, Net Heating Value (NHV), O₂ and COe, Wobbe, Specific Gravity, CARI, and full speciated composition





Fast, Multi-Cycle Total Sulfur Fuel Gas Analyzer **FGA-1000**™

Direct Heating Value Analyzer for BTU, CARI, Wobbe and Density 9610CXc[™] Calorimeter



In Situ O₂ and COe for Combustion Monitoring for Burner Optimization **O2CX™ Monitor**



Industrial Mass Spectrometers for Real-Time, Multi-Stream Fuel Compliance and Control MAX300-RTG[™] 2.0

Spectrometers & Electrochemical Analyzers



Continuous Emissions Monitoring (CEM)

Applications:

- Multi-gas, oxygen, and COe analyzers for continuous emissions monitoring (CEM) in industrial plants, power generation, refineries, engines, turbines, pulp and paper, cement, etc.
- Stack gas analysis for CEM (LDLs in ppb or ppt of $\rm NH_3,$ HCl, HF, $\rm H_2S,$ COe, NO, $\rm CH_4,$ and more)
- Trace HCl measurements to comply with US EPA rules
- Continuous monitoring of ammonia slip for lower cost of abating NOx
- Automated, multi-point analysis of waste gas and scrubber effluent for efficiency reporting



Handheld Multigas Emissions Analyzer **707 CX™**



In Situ O₂ and COe for Combustion Monitoring for Burner Optimization **O2CX™ Monitor**



In-Situ, Stack Gas Oxygen Analyzer **Zircomat™**



Real-Time Mass Spectrometer for ppb-Level, Multi-Impurity Analysis MAX300-LG™



CRDS CEMs analyzer for HCl, HF, NH₃ and more **T-I Max™ CEM**

Optical & Mass Spectrometers & Heating Value Analyzers



Applications:

- Real-time gas analyzers for flare compliance and control
- H₂S, Total Sulfur, Net Heating Value (NHV)/BTU, H₂, and full speciated composition
- Complete analysis for compliance with regulations such as EMACT, MONMACT, RSR, Subpart Ja, Ontario Reg. 530/18, Korean Facility Management Standards to Reduce Fugitive Emissions, and HRVOC rules







Injection Style Heating Value Analyzer for Zero-Hydrocarbon Emissions for BTU and Flare Control 9800CXi[™] Calorimeter



Real-Time Mass Spectrometer for Compliance and Flare Control MAX300-RTG[™] 2.0

Spectrometers & Electrochemical Analyzers

Fenceline & Ambient Air Analysis



- Monitor ambient air for OSHA compliance for workplace safety
- Real-time analysis of BTEX, acrylonitrile, VCM, EDC, HCl, VOCs, HAPs, solvents, H₂O, O₂, and LELs in air
- Low-level leak detection of hazardous compounds and EPA method 320 HAPS
- Ambient emission from industrial, agricultural, and urban environments
- Refinery benzene fenceline monitoring for Refinery Sector Rule (RSR) compliance



Percent and Trace Oxygen Analyzers, and Oxygen Deficiency Safety Monitors Series 2000™ and ZRO2000™



Real-Time Air Mass Spectrometer for Environmental Health and Safety MAX300-AIR™



CRDS for Real-Time, Methane, CO₂, and Formaldehyde T-I Max[™] AIR



CDRS Air Analyzers for Green House Gas T-I MAX-AIR GHG™



FTIR Environmental Vapor Monitoring Analyzer **ANALECT EVM™**



Powerful Quadrupole Mass Spectrometer for Toxic Gas Ambient Air Monitoring MAX300-TGM[™]

NIR Photometers & Probes for H₂O₂ and H₂O



Sterilization & Virus Deactivation

Applications:

- Measure sterilant gas concentration in real-time under ambient or vacuum conditions
- H₂O₂, H₂O, Ethylene Oxide, NOx under ambient or vacuum conditions for cycle development of sterilization chamber, filling isolators and Resistometers
- Optical RH and relative saturations measurements
- Independent reference for potential load production release



Dual Beam Photometer for Real-Time Hydrogen Peroxide Vapor Sterilant Gas Monitoring ClearView[®] db Hydrogen Peroxide Vapor Analyzer



Vapor Probe for H₂O₂ Analyzer System, Suitable for Vacuum and Positive Pressure (up to 2 atm) **G-SST™ Vapor Probe**

Optical Spectrometers & Water Quality Analyzers



Pure Water, Wastewater & Runoff

Applications:

- On-line water quality analysis for Total Organic Carbon (TOC), Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD)
- Water influent and effluent discharge control for environmental compliance
- Municipal water quality, drinking and surface water toxicity
- Airport deicing fluid capture and remediation
- Industrial stormwater and agricultural runoff



TOC Water Analyzer for Harsh Wastewater Applications QuickTOCultra™



Fast, Continuous, Online Toximeter for Drinking Water and Surface Water **ToxAlarm™**



TOC Water Analyzer for Clean Water Applications **QuickTOCuvII**™



UV-VIS Process Analyzer for Triazines and Precursors in Agricultural Runoff **508 UV-VIS**™



TOC Water Analyzer for Municipal & Cooling Water Applications QuickTOCeco™



COD Water Analyzer for Laboratories QuickCODIab™

Spectrometers, Water Quality, Electrochemical & Chilled Mirror Analyzers

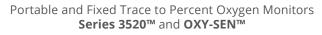


Laboratory, Safety, & Environmental Research

Applications:

- Full composition and trace gas analyzers for atmospheric chemistry and environmental research
- River water, environmental contamination, and wastewater monitoring
- Climatic chamber and glovebox moisture, temperature, and dew point sensor validation
- PPB to 100% H₂O and O₂ (aerobic or anaerobic activity), relative humidity and dew point, temperature, and compositional gas analysis
- Trace gas analyzers for H₂O, O₂, H₂, CH₄, NH₃, CO, CO₂, N₂, Ar, He, VOCs, HAPs, hydrocarbons, etc.





Aluminum Oxide Dew Point Meters for Portable/Fixed/Loop-Powered Applications **XPDM™ | HDT™ | LPDT2™**



Chilled Mirror Dew Point Hygrometer with Measuring Head for Temperature and RH Measurements MODEL 973™



TOC Water Analyzer for Clean Water Applications **QuickTOCuvII**™



Fast, Continuous, Online Toximeter for Drinking Water and Surface Water **ToxAlarm™**



Benchtop Mass Spectrometer for Real-Time ppb-Level to 100% Catalysis, Reaction Monitoring, and Environmental Research MAX300-CAT™



CRDS Trace Gas Analyzer for ppb-Level Detection of H_2O , CH_4 , CO, CO_2 and C_2H_2 **Spark**TM



Molecular Beam Mass Spectrometer for Pyrolysis and Environmental Research **VeraSpec™ MBx**

Optical & Mass Spectrometry Analyzers



Sulfur Analysis





Fast, Multi-Cycle Total Sulfur Gas Analyzer **SGA-1000**™

Real-Time Total Sulfur in Liquids Analyzer **SLA-1000™**

Applications:

- Sulfur analysis in butane, diesel, liquid fuels, Liquefied Natural Gas (LNG), hydro-treaters, blenders and scrubbers
- Renewable Natural Gas (RNG) and biofuels manufacturing
- H₂S, Total Sulfur and Total Nitrogen, and Trace Sulfur
- Meets ASTM D5453 for compliance with regulations like US EPA Tier III, Euro 6, and the Bharat VI



Real-Time Laboratory Total Sulfur and Total Nitrogen in Liquid and Gases **XT-2000™**



Industrial Mass Spectrometers for Real-Time, Multi-Stream Fuel Compliance and Control MAX300-RTG[™] 2.0

Heating Value, Spectroscopy & Electrochemical Analyzers



Greenhouse Gas/Carbon Emissions



- Monitor emissions of greenhouse gases from various sources such as landfills, gas and oil exploration sites, refineries, chemical plants, and agricultural facilities
- Combustion analyzers for steel, power, petroleum, petrochemicals, ceramics, paper & pulp, food, textiles, garbage incinerators, and boilers
- Optimized combustion control to reduce CO₂, SOx, and NOx emissions, and prevent global warming and air pollution
- Real-time analyzers for $\rm CH_{4'}$ CO, $\rm CO_{2'}$ $\rm O_{2'}$ NOx, $\rm SO_{2'}$ and $\rm H_2S$ in air



Injection Style Heating Value Analyzer for Zero-Hydrocarbon Emissions for BTU and Flare Control 9800CXi™ Calorimeter



Handheld Multigas Emissions Analyzer **707 CX**™



In-Situ, Stack Gas Oxygen Analyzer **Zircomat™**



CRDS Analyzer for the Detection & Continuous Monitoring of Methane and Greenhouse Gases (GHG) **T-I Max™ AIR**



In Situ O₂ and COe for Combustion Monitoring for Burner Optimization **O2CX™ Monitor**



GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights manufactures and delivers premium sensors, monitors, detectors, analyzers, instrumentation, and software that are mission-critical to keep your operations, personnel, and the environment safe – every day across the globe. Get the most reliable, precision analytical technologies available on the market today. We will work to match your needs and budget, and provide the optimal, and most stable process analysis solution for your application.

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