

## Solutions for Laboratories & Research

### High Quality Analyzers for Diverse Gas, Water and Liquid Applications

Spectrometers, Water Quality, Electrochemical & Chilled Mirror Analyzers



### **Academic & Advanced Research**

### **Applications:**

- University and government lab projects, including ion/particle physics, aerospace, vacuum analysis, isotopic analysis, residual gas analysis, outgassing studies, climatic chambers & glove boxes
- H<sub>2</sub>, He, D<sub>2</sub>, H<sub>2</sub>O, O<sub>2</sub>, N<sub>2</sub>, CO<sub>2</sub>, Ar, and more
- Glovebox moisture, temperature and dew point sensor validation



High-Performance

Mass Spectrometers

MAX-QMS™ and VeraSpec HRQ™





Oxygen Deficiency Monitors Series 1300™



CRDS Trace Gas Analyzers

Prismatic 3™ and HALO 3™



Chilled Mirror
Dew Point Meters
473 Model™

### Spectrometers, Electrochemical & Chilled Mirror Analyzers



### **Metrology**

### **Applications:**

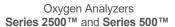
- Humidity standards and generators, calibration transfer and reference standards, test method validation, and sensor calibration
- ppt ppb ppm levels of O<sub>2</sub>, H<sub>2</sub>O, HCl, CH<sub>4</sub>, NH<sub>3</sub> and more
- Oxygen safety monitoring



CRDS Trace Gas Analyzers **HALO™ Series** 









Chilled Mirror Dew Point Meters and Humidity Generators 373 Model™

### Mass Spectrometers & Laser Spectroscopy Analyzers



### Materials & Catalysis Research



Real-Time, ppb-Level Lab Mass Spectrometer MAX300-LG™

### **Applications:**

- TPD, MBMS, pure gas analysis, packaging, TGA (and other thermal processes), laser ablation, plasma studies, outgassing studies, clusters research, reaction monitoring, loading/unloading, inhibitor breakthrough, and purifier development
- O<sub>2</sub>, H<sub>2</sub>O, H<sub>2</sub>, C1-C10+ hydrocarbons, chlorides, and other compounds



CRDS for ppt-Level Analysis for O<sub>2</sub> HALO OK™



CRDS for ppt-Level Analysis for H<sub>2</sub>O, CH<sub>2</sub>, and NH<sub>3</sub> HALO KA™



# Water Quality Analyzers

### Water & Wastewater

### **Applications:**

- Water influent and effluent discharge control
- Process control, high purity, oil in water, cooling water, condensate return, water-steam cycles, and environmental compliance
- Total Organic Carbon (TOC) in water



TOC Water Analyzer for Harsh Wastewater Applications QuickTOCultra™



Flange-Mounted Mass Spectrometers MAX-QMS™

TOC Water Analyzer for Clean Water Applications QuickTOCuvII™



TOC Water Analyzers for Pure and Process Water Applications QuickTOCpurity™



COD Water Analyzer for Laboratories QuickTOClab™

### Spectrometers & Chilled Mirror Analyzers



### **Fuel & Energy**

### **Applications:**

- Fuel cell H<sub>2</sub> purity per the ISO14687/SAE J2719 standards; quality control for Syngas, LNG, H<sub>2</sub> fuel cell technology, and nuclear energy
- ppt ppb ppm levels of CO, CO<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>, H<sub>2</sub>O, O<sub>2</sub>, CH<sub>2</sub>O, CH<sub>2</sub>O<sub>2</sub>, He, Ar, N<sub>2</sub> in H<sub>2</sub>, and isotopic analysis
- · Oxygen safety monitoring



Real-Time Laboratory Mass Spectrometer for ppb-to-100% Level for Multi-Species Analysis MAX300-LG™





CRDS Trace Analyzers **HALO Max QCL™** and **Prismatic 3™** 



Chilled Mirror Dew Point Meters and Humidity Generators 373 Model™

### Optical Spectrometers & Probes for H<sub>2</sub>O<sub>2</sub> & H<sub>2</sub>O



### **Sterilization**

### **Applications:**

- Measure Sterilant gas concentration in real-time under ambient or vacuum conditions
- Monitor H<sub>2</sub>O<sub>2</sub> and H<sub>2</sub>O, Ethylene Oxide, NOx for cycle development of sterilization chamber, filling isolators and Resistometers
- Optical RH and relative saturation measurements
- Sterilization process control, logging, or troubleshooting
- Independent reference for potential load production release



Dual Beam Photometer for Real-Time Hydrogen Peroxide Vapor (HPV) Sterilant Gas Monitoring ClearView db® Hydrogen Peroxide Vapor HPV™



Vapor Probe for H<sub>2</sub>O<sub>2</sub> Analyzer System, Suitable for Vacuum and Positive Pressure (up to 2 atm)

G-SST™ Vapor Probe

Spectrometers, Water Quality, Electrochemical & Chilled Mirror Analyzers



**Environmental Research, Safety & Compliance** 



TOC Water Analyzer for Clean Water Applications QuickTOCuvII™



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



CRDS Analyzer for Trace-Level Hydrogen HALO H2™



For a complete range of products, applications, systems, and service options, please contact us at: info@process-insights.com

### **Applications:**

- Ambient air analysis, pyrolysis, natural materials, isotopic analysis, greenhouse gas monitoring
- Full composition and trace gas analyzers for atmospheric chemistry and environmental research
- River water, contamination, and wastewater monitoring
- Climatic chamber and glovebox moisture, temperature and dew point sensor validation
  - Trace gas analyzers for compounds, including H<sub>2</sub>O, O<sub>2</sub>, H<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>, CO, CO<sub>2</sub>, N<sub>2</sub>, Ar, He, VOC, HAPs, hydrocarbons, etc.





Portable and Fixed Trace to Percent Oxygen Monitors Series 3520™ and OXY-SEN™



CRDS Air Analyzers
T-I Max AIR™

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



For a complete list of sales & manufacturing sites, please visit: https://www.process-insights.com/about-us/locations/



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