

Real-Time and Fixed Point Solutions for Gas and Water Applications

Mass Spectrometers & Laser Spectroscopy Analyzers



Solvent Drying

Applications:

- Accurate endpoint determination to improve product yield and production efficiency, and minimize waste
- Easily switch streams to monitor multiple chambers using the same, or different, solvents
- Optimized sampling for ambient pressures, vacuum drying, and lyophilizers
- Trace moisture analysis and multi-species analysis of solvents, such as IPA, MEK, DCM, ethyl acetate, styrene, acetonitrile, etc.



Industrial Mass Spectrometer for Real-Time, Multi-Stream, Solvent Drying and Endpoint Determination
MAX300-BIO™



Benchtop Mass Spectrometer for Real-Time, Multi-Stream, Solvent Drying and Endpoint Determination
MAX300-LG™



CRDS Trace-Level, Low-Pressure Moisture Analyzer for Lyophilization
HALO RP™/QRP™

Mass Spectrometers & Laser Spectroscopy Analyzers



Fermentation & Cell Culture Control

Applications:

- Fermenter bioreactor off-gas composition analysis
- Fast and accurate analysis for control parameters such as:
 - Oxygen Uptake Rate (OUR)
 - Carbon dioxide Evolution Rate (CER)
 - Respiratory Quotient (RQ) and fermentation end point
- Continuous monitoring to improve yield / quality and reduce waste - single species or multi-component analysis (e.g. CO₂, O₂, N₂, Ar, H₂O, CO, H₂, He, hydrocarbons, alcohols, aldehydes, sulfurs, etc.)
- Active Pharmaceutical Ingredients (API) and biomolecule production



Real-Time, Multi-Stream Mass Spectrometer Gas Analyzer for Accurate OUR, CER and RQ
MGA 1200CS™



Benchtop Mass Spectrometer for Real-Time Multi-Stream, Bioreactor Control
MAX300-LG™



CRDS Single-Species, Trace Gas Analyzer for ppb-Level H₂O, CH₄, CO, CO₂, Detection
Spark™

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™



TOC Water Analyzer for Clean Water Applications
QuickTOCuvII™



TOC Water Analyzer for Municipal & Cooling Water Applications
QuickTOCeco™



COD Water Analyzer for Laboratories
QuickCODlab™

Spectrometers, Electrochemical & Chilled Mirror Analyzers



Glove Box Monitoring

Applications:

- Real time, in situ glove box and incubation monitoring
- Ideal for vessel and climatic chamber monitoring and validation
- ppb to 100% H₂O and O₂ (aerobic or anaerobic activity), relative humidity and dew point, temperature and compositional gas analysis
- Glove box moisture, temperature and dew point sensor validation



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



Aluminum Oxide Dew Point Meters & Transmitters with Hyper-Thin-Film Technology for Portable/Fixed/Loop-Powered Applications
XDT™ | XPDM™ | LPDT™ | LPDT2™



CRDS Trace Gas Analyzer for ppb-Level Detection of H₂O, CH₄, CO, CO₂, and C₂H₂
Spark™



Laboratory Mass Spectrometers for Real-Time, ppb-level, Multi-Impurity Analysis
MAX300-LG™



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



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

Mass Spectrometers & Optical Spectroscopy Analyzers



Evolved Gas Analysis

Applications:

- Connects to thermal gravimetric analyzers (TGA) for off-gas monitoring
- Quality control in reaction monitoring, natural product analysis and synthesis studies
- Microreactor off-gas and head-space analysis
- Single species or multi-component analysis (e.g. CO₂, O₂, N₂, Ar, H₂O, CO, H₂, He, hydrocarbons, alcohols, aldehydes, sulfurs, etc.)



CRDS Trace-Level Low-Pressure Moisture Analyzer
HALO RP™/QRP™



CRDS Ambient Pressure Analyzer for Trace HCl, NH₃, HF, CO, and CH₄
T-I Max™



CRDS Trace Gas Analyzer for ppb-Level of H₂O, CH₄, CO, CO₂, and C₂H₂ Detection
Spark™



Benchtop Mass Spectrometer with Heated, Evolved-Gas Inlet for Real-Time, Continuous Off-Gas Analysis
MAX300-EGA™

Spectrometers, Water Quality, Electrochemical & Chilled Mirror Analyzers



Laboratory, Safety, & Compliance

Applications:

- Air and fenceline monitoring
- O₂ deficiency safety monitoring, sulfur and nitrogen in fuels and biofuels, moisture calibration of sensors and standards
- Quality of process gas supplies (CDA, N₂, CO₂, etc.)
- Trace gas analyzers for compounds such as H₂O, O₂, H₂, CH₄, NH₃, CO, CO₂, N₂, Ar, He, and hydrocarbons



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



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



Total Sulfur-Total Nitrogen Gas Analyzers
XT-2000™



Chilled Mirror Dew Point Meters
373 Model™



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



COD Water Analyzer for Laboratories
QuickCODlab™



FTIR Environmental Vapor Monitoring Analyzer
ANALECT EVM™



TOC Water Analyzers for Pure and Process Water Applications for Laboratories
QuickTOCpurity™

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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REVOLUTIONIZING MEASUREMENT

EVERYWHERE