**Air Pollution Analyzer**

**AP-370 series**

- NOx, SOx, CO, CO2, O3, H2S, NH3, THC, NMTHC, CHx, NMVOC
- NOx: 0 - 1.0, 2.0, 5.0 ppm
- SOx: 0 - 0.05, 0.1, 0.2 ppm
- CO: 0 - 5, 10, 20 ppm
- CO2: 0 - 100, 200 ppm
- O3: 0 - 0.1, 0.2 ppm
- H2S: 0 - 0.5 ppm
- NH3: 0 - 1.0 ppm
- THC, NMTHC, CHx: 0 - 5, 10, 20, 50 ppm
- NMVOC: 0 - 2000 ppm
- PX-375: Continuous Particulate Monitor with X-ray Fluorescence
- Anti-drift by Cross Flow Modulation technology
- Multipoint calibration: 8 individually adjustable cycles, each with up to 20 points
- Dynamic generation of span gas by dilution system. Integrated zero gas for zero drift suppression
- Remote Operation via internet connection enables user to check status and acquire data without going on site.
- CE, TÜV, FCC, MCERTs, GOST, CPA, KC, JAPAN etc

**Continuous Particulate Monitor with X-ray Fluorescence**

**PX-375**

- Particulate Matter (PM10/PM2.5/TSP)
- Particulate mass concentration and element concentration
- Measurement range: 0 - 2000 μg/m³
- Other ranges are also available. Please consult HORIBA.
- Continuous hourly analysis of PM mass and the elemental concentration
- by a single unit directly in the field.
- Adoption of world proven technologies: X-ray fluorescence & Beta-ray attenuation, advanced analysis for prevention of air pollution.
- Remote Operation via internet connection enables user to check status and acquire data without going on site.
- CE, FCC, KC etc

**On-line Industrial Water Quality Analyzer**

**H-1 series**

- pH, ORP, Conductivity, Resistivity, Residual chlorine, Dissolved oxygen, Turbidity, MLSS, Fluoride ion, NH4-N
- pH: 0 to 14
- ORP: -2000 to 2000 mV
- Conductivity: 0 to 200.0 mS/cm 
- 0.0 to 20.0, 0 to 2000 μS/cm
- Resistivity: 0.000 to 2000 MΩ-cm
- Dissolved oxygen: 0 to 20.0 mg/L
- Turbidity: 0 to 500 NTU
- MLSS: 0 to 2000 mg/L
- Fluoride ion: 0 to 10000 μg/L
- NH4-N: 0 to 10.0 mg/L
- * Other ranges are also available. Please consult HORIBA.
- H-1 series comprehensively suits all kinds of water applications, ranging from purified water monitoring to waste water monitoring.
- Lineup with focus on robustness, functionality and maintainability that responds to harsh conditions at the installation sites.
- Essential functions for water analyzer management such as noise resistance, auto calibration, self-diagnosis, and full interface.
- CE, FCC, KC etc

**Panel Types Water Quality Measuring Instruments**

**48/96 series**

- pH/ORP/Conductivity/Resistivity/Dissolved Oxygen/Residual Chlorine
- Please consult HORIBA.
- Well-developed status indicator icons.
- Setting with the front-panel keys.
- Utilization of lead-free solder.
- CE, FCC, KC etc

**Organic Pollutant Monitor**

**OPSA-150**

- UV absorbance, VIS absorbance, Converted COD level, Converted BOD level, Converted TURB level
- UV absorbance, VIS absorbance
- 0 - 0.1 Abs to 0 - 5.0 Abs (Can be set 0.1 Abs increments)
- - HORIBA’s unique rotary cell length modulation sensor ensures no zero-drift as well as covers a wide measurement range from as low as 0 to 0.1 Abs, up to 5.0 Abs, while providing a minimum resolution of 0.0001 Abs.
- - Sample error alarm comes as a standard feature.
- - OPSA-150 offers data storage to save up to one year of data and continuous cell wiper system which greatly reduces maintenance.
- CE, FCC, KC etc
A generator or external zero gas generator (ZNV-7) is also available.

An automatic discontinuous zero gas measurement is made. At calibration points and each calibration cycle runs also automatically.

- Concentration: better than 1%.

**VOC (Volatile Organic Contamination) Analysis**

- AP-370 series

**Management Software**

- IDA-2000, IDA-ZRW

**Oxygen/Phosphorus Monitoring System**

- HORIBA produced the first national pH meter in 1950 in Japan. Since then, we have been producing a variety of water quality analyzers and systems which are designed according to the customer’s request. HORIBA has unrivaled knowledge and expertise to provide a suitable system to meet your regulation requirement. To date, approximately 200 WQMS have been installed in Korea alone.

- 50, 100, 200, 500, 1000 mgN/L
- 5, 10, 20, 50, 100, 250 mgP/L

**Air Quality Monitoring System**

HORIBA has more than 50 years experience providing ambient monitoring solutions, recognized around the world. HORIBA has supplied over 15,000 units with the major share in many regions. The monitoring station is tailor-made according to the customer’s request. HORIBA can provide several types of stations, cabinets, calibration equipment and more to meet your challenging monitoring requirements.

- 50, 100, 200, 500, 1000 mg/L (1-dilution type)

**Water Quality Monitoring System**

HORIBA has more than 50 years experience providing ambient monitoring solutions, recognized around the world. HORIBA has supplied over 15,000 units with the major share in many regions. The monitoring station is tailor-made according to the customer’s request. HORIBA can provide several types of stations, cabinets, calibration equipment and more to meet your challenging monitoring requirements.

- 50, 100, 200, 500, 1000 mg/L (1-dilution type)

**Effective measurement technology and measurement efficiency**

- Method and enhanced measurement technology (option) contributes to the efficiency.
- Reduction by approx. 30%, with pure generated reduced to 1/2.
- HORIBA provides easy handling and low consumption (0.5-2 ml/measurement) and enables no cooling water.

**Different sample types and applications**

- HORIBA provides easy handling and low consumption (0.5-2 ml/measurement) and enables no cooling water.

**Maintenance/Cleaning Industrial pH Analyzer**

- AH-151

**Turbidity Analyzer**

- LO-300
HORIBA has been supplying stack gas analyzers for more than 50 years and have invented several analyzer technologies and sampling systems. HORIBA has supplied more than 100,000 units so far around the world and has the largest market share in Japan for power plant applications*. We can supply systems that comply with regulations in various regions such as Europe, US, China and Korea with our wealth of knowledge and experience.

*As of 2014, based on our company’s research.

**Stack Gas Analyzer**

### ENDA-5000 series

- **NOx**: 0-200 to 5000 ppm
- **SO2**: 0-200 to 5000 ppm
- **CO2**: 0-5 to 25 vol%  
  * Can be set to dual ranges. Range ratio shall be within factor 10 as standard.
- **CO**: 0-200 to 5000 ppm  
  * Other ranges are also available. Please consult HORIBA.
- **O2**: 0-10 to 25 vol%  
  * It can be set to dual ranges. Range ratio shall be within factor 10 as standard.

### ENDA-7000 series

- **NOx**: 0-10 to 5000 ppm
- **SO2**: 0-10 to 5000 ppm
- **CO**: 0-50 to 5000 ppm  
  * It can be set to dual ranges. Range ratio shall be within factor 10 as standard.
- **CO2**: 0-5 to 50 vol%  
  * Other ranges are also available. Please consult HORIBA.
- **O2**: 0-5 to 25 vol%  
  * It can be set to dual ranges. Range ratio shall be within factor 10 as standard.

### VA-5000 series

- **CO**: 0-50 to 100 vol%  
  * Other ranges are also available. Please consult HORIBA.
- **CO2**: 0-50 to 100 vol%  
  * Other ranges are also available. Please consult HORIBA.
- **NOx**: 0-20 to 0-5000 ppm
- **SO2**: 0-100 to 10 vol%  
  * Other ranges are also available. Please consult HORIBA.
- **CH4**: 0-200 to 100 vol%  
  * Other ranges are also available. Please consult HORIBA.
- **N2O**: 0-100 to 5000 ppm  
  * Other ranges are also available. Please consult HORIBA.
- **NH3**: 0-100 to 0-1000 ppm  
  * Other ranges are also available. Please consult HORIBA.
- **O2**: 0-5 to 100 vol% (MPA and Paramagnetic which is only available in Europe)  
  * Other ranges are also available. Please consult HORIBA.

### Dilution CEMS: AP-370 series

**Related Products**

- Multi-Component Gas Analyzer: VA-5000 series

**Related Products**

- Process Gas Chromatograph: Other

Any process analyzer can be integrated with HORIBA analyzers to provide accurate and sensitive range measurement with accepted methods including Cross Flow Modulation type - NDIR, Chemiluminescence, Ultraviolet, and Magneto-pneumatic technology. 6 components can be measured simultaneously with multiple detectors in a single analyzer. Easy to operate the test for US EPA such as CGA, Linearity, RATA etc with the integrated software’s.

HORIBA's facility in Texas, United States has an advantage of process analysis. We obtained the system integration facility in Houston USA which was previously well known as PAAI. We can offer a total package such as system design, engineering, application development, and on-site maintenance services. We are able to provide process analytical systems which not only use HORIBA’s analyzers but also other brand’s analyzers as per the customer’s requirements.
De-NOx Process Gas Analyzer

**ENDA-C9000**

- NH\(_3\), NO\(_x\), O\(_2\)
  - NH\(_3\): 0-20 to 100 ppm
  - NO\(_x\): 0-10 to 5000 ppm
  - O\(_2\): 0-5 to 25 vol%
  - It can be set to dual ranges. Range ratio shall be within factor 10 as standard.
  - Other ranges are also available. Please consult HORIBA.
  - Reliable, accurate and sensitive range measurement with accepted methods including Cross Flow Modulation type - NDIR, Chemiluminesence, Ultraviolet, and Magneto-pneumatic technology.
  - 6 components can be measured simultaneously with multiple detectors in a single analyzer.
  - Capability of combining with other system utilizes combustion measurement in variety of industries.
  - CE, FCC, US EPA etc

Transportable Gas Analyzer

**PG-300 series**

- NO\(_x\), SO\(_2\), CO, CO\(_2\), O\(_2\), CH\(_4\)
  - NO\(_x\): 0-25/50/100/250/500/1000/2500 ppm
  - SO\(_2\): 0-200/500/1000/3000 ppm
  - CO: 0-200/500/1000/2000/5000 ppm
  - CO\(_2\): 0-10/20/30 vol%
  - O\(_2\): 0-5/10/25 vol% (Zirconia or Galvanic) (For Paramagnetic Method, please contact HORIBA representative in your area for the details.)
  - There are several combinations and ranges available. Please consult HORIBA for more information.
  - Capable of up to 5 component measurement simultaneously with built-in sampling unit.
  - Max 5 days continuous measurement is available and necessary data and trend graph can be stored in an integrated data logging function.
  - User-friendly functions such as an integrated instruction manual can be accessed from the LCD display.
  - CE, TÜV, FCC, MCERTS, GOST, CPA, KC, JAPAN etc

Tunable Laser Hydrogen Chloride Analyzer

**TX-100**

- HCl, H\(_2\)O
  - HCl: 0-50 to 500 ppm
  - H\(_2\)O: 0-50 vol%
  - Laser analyzer requires non-sampling which enables direct measurement and quick response.
  - Probe type optical system saves installation cost and maintenance cost.
  - HORIBA’s original calibration mechanism allows analyzer to calibrate without any disruption to the facility’s operations.
  - CE, FCC, KC

In Situ Oxygen Monitor

**NZ-5000**

- O\(_2\)
  - 0-ppm to 100%
  - Continuous measurement of O\(_2\) in stack gas with deviation of only 0.2% from the measured value.
  - Electronically monitored pneumatic unit for reference air and calibration gas. (optional)
  - Explosion-proof type is also available.
  - CE, TÜV etc

Features

**Measument items**

- Range
- Features
- Certificates & Compliance

HORIBA’s original calibration mechanism allows analyzer to calibrate without any disruption to the facility’s operations.

**Measurement items**

- Range
- Features
- Certificates & Compliance
AQMS as the doctor for "Human Health"

Overview
The Air Quality Monitoring System (AQMS) is a facility to measure wind speed, direction, other weather parameters, concentration of air pollutants (such as SO₂, NOₓ, CO, O₃, THC etc), and particulate matters continuously all year round. Mobile AQMS can also be customized to monitor multiple sites via one system.

Main Products
AP-370 series  APDA-371  APMC-370
PX-375  APDA-372

Water Quality Monitoring System

Understanding the life cycle of water is essential for us to live on the earth. Water will be consumed, polluted, treated, discharged, and then returned as our water resource again through various sources such as rain. It is especially critical to monitor the waste water discharge from a factory to protect our water resources.

WQMS as the guardian to protect nature life source "Water"

Overview
Water Quality Monitoring System (WQMS) is a facility to measure pollutants such as Chemical Oxygen Demand (COD), Total Phosphates (TP), Total Nitrogen (TN), etc. The required parameters are customized according to the type of factory and discharge regulations.

Main Products
H-1 series  OPSA-150  TPNA-500
48/96 series  CODA-500
In an oil refinery, the crude oil will be converted to final products (Gasoline, Naphtha, etc.) through several processes such as distilling, cracking etc. HORIBA analyzers are utilized to optimize the process and increase production efficiency.

Overview

The Continuous Emission Monitoring System (CEMS) is a facility to measure flow, dust, concentration of air pollutants (such as SO₂, NOₓ, CO etc), and other parameters according to requirements. Required parameters depend on the type of stationary source.

Main Products

- **ENDA-5000 series**
- **GI-700 series**
- **PG-300 series**
- **ENDA-7000 series**
- **ENDA-C9000 series**

**The system as the facilitator to optimize ”Industrial Process”**

The example of sample measurement point of refinery plant with HORIBA analyzers

In an oil refinery, the crude oil will be converted to final products (Gasoline, Naphtha, etc.) through several processes such as distilling, cracking etc. HORIBA analyzers are utilized to optimize the process and increase production efficiency.

Main Products

- **VA-5000 series**
- **51 series**
- **TX-100**
- **GA-370**
- **NZ-5000**

**Overview**

Process Analyzer System is a facility to measure necessary parameters such as hydrocarbons to help optimize the manufacturing process. The analyzer is chosen that best meets the customer requirements.
**Infrared Thermometer IT-480 series**

**Temperature**
This infrared thermometer with industry leading* accuracy can be used for the temperature control of production lines, devices and plants in various factories. It can also be used for a wide range of other purposes, including research and development and experiments, by connecting to a Windows® personal computer.

*Internal investigation in 2019

**Gloss Checker IG series**

**Gloss**
This gloss checker provides easy measurement of surface gloss levels, by quantifying the surface appearance visual inspection. Ideal for automotive coating inspections, floor waxing coating inspections, etc.

**Environmental Radiation Monitor PA series**

**(gamma) rays**
This is a portable monitor that allows easy and accurate measurement of gamma rays. It is equipped with a data communication function, enabling automatic recording of measured data and dose mapping, in linkage with a smartphone or computer.

**Oil Content Analyzer OCMA-500 series**

**Oil content**
This analyzer measures oil content in water or seawater, residual oil on machine parts, and oil content in soil, etc. Easy to operate, this analyzer delivers speedy measurements.

**Multi Parameter Water Quality Checker U-50 series**

pH / Dissolved oxygen / Electrical conductivity / Turbidity / Oxidation-reduction potential / Salt content / Specific gravity of seawater / Total dissolved solid quantity / Water temperature / Water depth / GPS

Many items can be measured simultaneously with one probe. This portable checker is best for outdoor use, such as measurements of river water, lake water, well water, and ground water.

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**Please read the operation manual before using this product to assure safe and proper handling of the product.**

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