

Emission Monitoring Systems Market Research

FIVE-YEAR MARKET ANALYSIS AND TECHNOLOGY FORECAST THROUGH 2023

PEMS PROVIDES A COST-EFFECTIVE ALTERNATIVE TO CEMS

Rapid industrialization is one of the overwhelming contributing factors to severe environmental damage. Toxic emissions from various industries can pollute air, water, and land. Power plants and many other industries are emitting tons of harmful gases into the atmosphere. Recognizing the negative consequences of these gases, many countries have taken major steps to properly monitor and curb emission levels.

Governments around the world require industries to keep track of pollutant emission rates using emission monitoring systems (EMS). While continuous EMS (CEMS) has been traditionally used and approved for emission monitoring, many countries now also approve software-based predictive EMS for use in certain applications in lieu of an installed CEMS.

More plants are now choosing CEMS that utilizes Fourier transform infrared spectroscopy (FTIR), as this technique can measure multiple gases without frequent calibrations. In situ systems are also getting more popular as these can measure ammonia (NH₃) gas. Multi-component products will reduce the cost of ownership with connected world (Internet of Things) solutions, and sensitive products are required due to reduction in emission limit values with a complete solution.

PEMS provides a cost-effective alternative to CEMS. Although PEMS is now approved for use in lieu of CEMS by US, as well as a few European and Middle Eastern countries, adoption of PEMS remains slow. A major reason for slow adoption is limited applicability of the PEMS.

For more information, please visit us at www.arcweb.com/market-studies/.

STRATEGIC ISSUES

Users are exhibiting a cautious optimism toward emission monitoring systems. Nevertheless, suppliers believe it is not a question of IF, but WHEN they will catch on. So how can suppliers increase their value proposition?

- Are different strategies required for new installations vs. retrofit?
- Will new distribution channels be required?
- How critical is initial cost in relation to lifecycle cost?
- How will niche market products impact the total market?

RESEARCH FORMATS

This research is available as a Market Intelligence Workbook (Excel) and/or a concise, executive-level Market Analysis Report (PDF), with or without detailed charts.

RESEARCH FOCUS AREAS

STRATEGIC ANALYSIS

Major, Regional, and Industry Trends
Strategic Recommendations

COMPETITIVE ANALYSIS

Market Shares of the Leading Suppliers
Market Shares by Region
North America
Europe, Middle East, Africa
Asia
Latin America
Market Shares by System Type
CEMS
PEMS
Market Shares by Revenue Category
Hardware Revenues
Software Revenues
Services Revenues
Market Shares by Component
Analyzer
Data Acquisition System
Hardware Mounting
Sample Conditioning
Sensors/Probe
Shelter/Enclosure
Workstation
Market Shares by Measured Variable

Market Shares by Application Type
Market Shares by Transmission Method
Market Shares by Industry
Cement & Glass
Chemical
Electric Power Generation
Incineration
Metals
Mining
Oil & Gas
Pharmaceutical & Biotech
Pulp & Paper
Refining
Market Shares by Sales Channel
Market Shares by Customer Type

MARKET FORECASTS & HISTORIES

Shipments by Region
Shipments by System Type
Shipments by Revenue Category
Shipments by Component
Shipments by Measured Variable
Shipments by Application Type
Shipments by Transmission Method
Shipments by Industry
Shipments by Customer Type
Shipments by Sales Channel

INDUSTRY PARTICIPANTS

The research identifies all relevant suppliers serving this market.

The Worldwide Emission Monitoring Systems Market

