

Global Laser Based Gas Analyzers Market Size study & Forecast, by Process (In Situ, Extractive), by Type (Tunable Diode Laser Spectroscopy, Raman Spectroscopy, Cavity Ring-Down Spectroscopy), by End-Users (Power, Mining and Metal, Automotive) and Regional Analysis, 2022-2029

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Abstracts

Global Laser Based Gas Analyzers Market is valued at approximately USD XX billion in 2021 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2022-2029. The sizes of the particles in a substance are determined using particle size analyzers for laser diffraction. By measuring the angle of light scattered as the particles go through a laser beam, the size of the particle is determined. The laser-based gas analyzer is anticipated to be primarily used by the oil and gas industry. The demand for gas analyzers using lasers may expand as a result of the rising natural gas demand in developing nations. The major driving factors for the market are rising demand for natural gas and growing end-use industry.

Obama's administration in the US tightened regulations in 2015 to reduce methane emissions. Due to obsolete infrastructure, corporations were unable to comply with the standards in 2018, thus the Trump administration later loosened them. The International Energy Agency (IEA) reported that the usage of renewable energy in the global energy mix increased by 3% in 2020, while the demand for all other fuels decreased. This was primarily due to a 7% increase in the production of power from renewable sources. Despite challenges such as decreasing electricity demand, building delays, and supply chain disruptions caused by the pandemic, the growth of renewable energy was supported by long-term contracts, priority access to the grid, and the continued installation of new plants. Consequently, the share of renewable energy in the world's

electrical generation rose from 27% in 2019 to 29% in 2020. Moreover, high government support for laser-based gas analyzers is creating lucrative growth opportunity for the market. However, the high cost of Laser Based Gas Analyzers stifles market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Laser Based Gas Analyzers Market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America dominated the space in terms of revenue, owing to the dominance of branded companies, and growing demand for natural gases. Asia Pacific is expected to grow significantly during the forecast period, owing to factors such as increase in the number of collaborations for the development of laser-based gas analyzers, geographic expansion of key players, and active participation of government and nonprofit organizations in the market space.

Major market players included in this report are:

ABB Ltd

HORIBA Ltd

KNESTEL Technology & Electronics GmbH

Honeywell International Inc.

Kaiser Optical Systems Inc.

Yokogawa Electric Corporation

AMETEK Land Instruments International

Emerson Electric Co

Siemens AG

General Electric Corporation

Recent Developments in the Market:

Emerson released the Rosemount CT4400 Continuous Gas Analyzer in March 2019. It is a purpose-built QCL and TDL analyzer that measures standard components like nitric oxide (NO), nitrogen dioxide (NO₂), sulphur dioxide (SO₂), carbon monoxide (CO), carbon dioxide (CO₂), and oxygen to help plants report emissions accurately in environmental monitoring applications (O₂).

ABB's IoT solution transformed a drone into a gas detection sensor in March 2019. The analyzer from ABB uses patented cavity-enhanced absorption spectroscopy, which has a sensitivity 1,000 times greater than other leak detection methods.

Global Laser Based Gas Analyzers Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered Process, Type, End-Users, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World

Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and Process offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Process:

In Situ

Extractive

By Type:

Tunable Diode Laser Spectroscopy

Raman Spectroscopy

Cavity Ring-Down Spectroscopy

By End-Users:

Power

Mining and Metal

Automotive

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France
Spain
Italy
ROE
Asia Pacific
China
India
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Rest of the World

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