

Global Photonic Sensor Market Forecast by Type (laser, Biophotonic, Fiber Optic) & Application (oil & Gas, Military & Aerospace, Energy & Infrastructure, Medical) 2011?16

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Abstracts

Global Photonic Sensor Market Forecast by Type (laser, Biophotonic, Fiber Optic) & Application (oil & Gas, Military & Aerospace, Energy & Infrastructure, Industrial Automation, Medical & Others) 2011?16

The APAC region is expected to generate \$2.61 billion with a CAGR of 21.31%; followed by Europe, North America, and ROW at a CAGR of 14.56%, 13.56%, and 12.94% respectively from 2011 to 2016. Among the APAC countries, China is expected to be the biggest emerging market for photonic sensors.

Photonic sensing technology incorporates emission of light, transmission, deflection, amplification and detection by optical components, instruments, lasers, other light sources, fiber optics, electro-optical instrumentation, and sophisticated nanophotonic systems. It provides smaller, cheaper, lighter and faster components and products, with greater functionality while using less energy.

In recent years, photonics has been recognized as an enabling technology that impacts, extends across, and underpins a whole host of industrial sectors, from healthcare to security, from manufacturing to telecommunications, from energy to the environment, and from aerospace to biotechnology. In all these sectors, photonics sensing activity can be recognized via the intelligent application of light ('optical radiation') either in an entirely novel context such as a new photodynamic medical treatment, or as a replacement for an older outdated technology such as signage and lighting based on the use of incandescent lamps.

Photonic sensors are now key technologies in oil and gas exploration in European market, due to which it is the second fastest growing market after APAC region.

A market in industrial category requires global commercialization for it to generate constant revenues for the major players. Currently, photonic sensors face a major challenge in product compatibility and shortage of skilled and trained personnel who lack the required technical expertise to adapt to the latest technology. From an end-user perspective, it is important to recognize that no matter how good the sensor is, there needs to be some level of incorporation into a system, often an instrument, for it to actually fill an economically useful note.

Regarding laser sensors, European market is expected to be slow and reluctant in the next five years; Asia is a strong market whereas U.S. is faced by many highs and lows mainly due to unstable customer preferences and regularly changing technologies

Scope of the report

This photonic sensors market research report segments the global market on the basis of applications, types, and geographical analysis, forecasting revenue, and analyzing trends in the market.

On the basis of application

The application market is segmented into industrial applications. The major applications are further classified into military, homeland security, industrial process, factory automation, civil structures, transportation, and biomedical over wide range of applications. The market trends for these applications are discussed.

On the basis of technology

Four types of technologies are discussed in the report; namely the Interferometric, Polarization, Spectrally-based fiber optic sensors, Multiplexing and distributed sensors. The distributed fiber sensing technology is further classified into Interferometric, Bragg gratings, Raman scattering, and Brillouin scattering.

On the basis of geography

North America

Europe

Asia-Pacific

ROW

Each section will provide access to market data, market drivers, trends and opportunities, key players, and competitive outlook. It will also provide market tables for covering the sub-segments and micro-markets. In addition, the report provides more than 17 company profiles covering all the sub-segments.

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