

Photonic Sensors Market by Type (Fiber optic sensors, Image sensors and Biophotonic sensors), Technology (Fiber optic technology, Laser technology and Biophotonic technology), Application (Military, Homeland security, Factory automation, Civil structures, Transportation, Mass transportation market, Airport security, Port security, Biomedical, Micro fluidic, Wind energy turbines and Oil and gas) - Global Opportunity Analysis and Industry Forecast, 2014 - 2021

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### **Abstracts**

The photonic sensors market has undergone a drastic change based on the researches that have been conducted in the photonic technology in the past. The photonic technology has advanced into varied fields. The innovations in the field of fiber optics have spurred the development of photonic sensors. These developments have expanded the spectral range of sensors being used in several industries. Photonic sensors allow better sensing and detecting functions and it is expected that this technology would give a high return on investment in the long run. The photonic industry is now focusing on development of eco-efficient products that are projected to be developed and launched over the next few years. Need for enhanced safety and security solutions, better alternative for conventional technology and rise in wireless sensing technology are some of the major factors that act as drivers for the photonic sensor market. Similarly, lack of industrial and technological standards, high initial investments and lack of awareness can be considered as restraints for the market. The photonic sensor market is segmented on the basis of type, technology, application



and geography. The photonic sensor type segment comprises of fiber optic sensors, image sensors and biophotonic sensors. Fiber optic sensors are further classified into Bragg Grating Sensors (FBG SENSORS), Distributed Sensors, Quasi Distributed Sensors, Wavelength Division Multiplexing (WDM), Time Division Multiplexing (TDM) and Point Sensors. The image sensors are further analyzed from their subtypes such as Charge-Coupled Devices (CCD), Complementary Metal Oxide Semiconductors (CMOS), Position-Sensitive Detectors (PSD) and Photoelectric Sensors. Intrinsic and extrinsic biophotonic sensors are the subtypes of biophotonic sensors. Based on the technology photonic sensors are classified into fiber optic, laser and biophotonic technology. Military, homeland security, industrial process, factory automation, civil structure, transportation, biomedical, wind energy turbines, oil and gas and others are some of the domains where photonic sensors find their application. In order to gain a diverse geographical insight, the market is analyzed as per different geographic regions such as North America, Europe, Asia-Pacific and LAMEA. Numerous companies are undertaking product launches, acquisitions and expansion as the key measures to excel in the market. The prominent players such as Baumer Holdings AG, Banner Engineering Corp., Omron Corporation, Truesense Imaging Inc., etc., have been analyzed in order to study their winning strategies. The analysis of the key market players and their strategies would help in understanding the competition.

#### **KEY BENEFITS**

This study provides an in-depth analysis of the photonic sensors market with current and future trends to elucidate the imminent investment pockets in the market

Current and future developments are outlined in this report to determine the overall attractiveness and to single out profitable trends for gaining a stronger foothold in the market

This report also provides information regarding key drivers, restraints and opportunities with impact analysis

Quantitative analysis of the current market and estimations through 2013–2020 are provided to highlight the financial attractiveness of the market

Porter's Five Forces model and a SWOT analysis of the industry illustrates the potency of the buyers and suppliers participating in the market



Value chain analysis in the report provides a clear understanding of the roles of stakeholders involved in the value chain

**Key Market Segmentation** 

The photonic sensor market is segmented on the basis of type, technology, application and geography.

MARKET BY TYPE

Fiber optic sensors

Image sensors

Biophotonic sensors

### MARKET BY TECHNOLOGY

Fiber optic technology

Laser technology

Biophotonic technology

### MARKET BY APPLICATION

Military

Homeland security

Industrial process

Factory automation

Civil structures

TransportationMass transportation market



Airport security

LAMEA

	Port security	
	Biomedical	
	Micro fluidic	
	Bio and environmental analytics	
	Wind energy turbines	
	Oil and gas	
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