

# Quantum Sensors Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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## Abstracts

The global quantum sensors market size reached US\$ 506.8 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 786.6 Million by 2028, exhibiting a growth rate (CAGR) of 6.9% during 2023-2028.

Quantum sensors are devices that rely on quantum coherence to measure dynamic and static physical quantities of force, pressure, light intensity and electromagnetic field. They comprise magnetometers, atomic clocks, and avalanche photodiode (ADP), which makes them highly-efficient sensitivity measurement instruments. Moreover, as they offer considered credible and offer accurate results, quantum sensors find applications in magnetic resonance imaging (MRI), nuclear magnetic resonance spectroscopy, positioning systems, transistors, light-emitting diodes (LED), solar panels, and lasers. Besides this, the rising penetration of GPS systems in the aerospace industry is also positively influencing their demand around the world.

### Quantum Sensors Market Trends:

The increasing utilization of quantum sensors in naval forces for calculating accurate positioning data of submarines in the ocean represents one of the major factors propelling the market growth. Moreover, there is a rise in the use of quantum sensors for measuring photosynthetic photon flux (PPF) in plant canopies. This, along with the development of quantum sensing solutions in material science, is contributing to the growth of the market. In addition, rising technological advancements in quantum imaging, simulation, and sensing across the globe, in confluence with the utilization of quantum sensors in detecting gas, oil and mineral deposits, are driving the market. Additionally, the integration of quantum sensors in vehicle-to-everything (V2X) communications to detect pedestrians beforehand is minimizing road accidents. Apart

from this, the growing implementation of quantum entanglement technology in the healthcare industry for monitoring patients remotely, assisting diagnosis, and enhancing consumer healthcare experiences is stimulating the growth of the market. Furthermore, key market players are extensively investing in research and development (R&D) activities to introduce early-warning systems for earthquakes, volcanic eruptions, and underwater storms, which is projected to bolster the market growth.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global quantum sensors market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on product and application.

#### Breakup by Product:

- Atomic Clocks
- Magnetic Sensors
- PAR Quantum Sensors
- Gravity Sensors

#### Breakup by Application:

- Military and Defense
- Automotive
- Agriculture
- Oil and Gas
- Healthcare
- Others

#### Breakup by Region:

- North America
  - United States
  - Canada
- Asia-Pacific
  - China
  - Japan
  - India
  - South Korea

Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being AOSense Inc., Apogee Instruments Inc., Campbell Scientific Inc., GWR Instruments Inc., Impedans Ltd., LI-COR Inc., M Squared Lasers Limited, Muquans SAS (iXblue), Robert Bosch GmbH, Sea-Bird Scientific and Skye Instruments Limited.

#### Key Questions Answered in This Report

1. What was the size of the global quantum sensors market in 2022?
2. What is the expected growth rate of the global quantum sensors market during 2023-2028?
3. What has been the impact of COVID-19 on the global quantum sensors market?
4. What are the key factors driving the global quantum sensors market?
5. What is the breakup of the global quantum sensors market based on the product?
6. What is the breakup of the global quantum sensors market based on the application?
7. What are the key regions in the global quantum sensors market?
8. Who are the key players/companies in the global quantum sensors market?

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