

Quantum Dot - Global Market Outlook (2017-2023)

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Abstracts

According to Statistics MRC, the Global Quantum Dots Market is accounted for \$734.30 million in 2016 and is expected to reach \$22066.36 million by 2023 growing at a CAGR of 62.6 % during the forecast period. Factors such as rising demand for optimized devices with better performance and resolution quality and ability to emit brighter light increases energy efficiency are fueling the market growth. However, huge price of the technology, small price of competing technologies and use of heavy metals as raw material are hampering the market growth.

A quantum dot is an element of matter so small that the addition or removal of an electron fluctuations its properties in some beneficial way. Quantum dots usually take dimensions measured in nanometers, where one nanometer is 10^{-9} meter or a millionth of a millimeter.

By technology, electrochemical assembly is a method to produce quantum dots includes electrochemical processes. It uses an ionic reaction at the edge among a metal and an electrolyte to form a pattern of impulsive nanocrystal formation. The metal that transmits the pattern is then used in a procedure of mesa etching in the development of the quantum dots. Asia Pacific is expected to grow at a fastest CAGR during the forecast period attributed to huge technological advancements in the region.

Some of the key players in Quantum Dots Market include Dow Chemical Company, Ocean NanoTech LLC, QD Vision, Inc., Altair Nanotechnologies, Inc., Thermo Fisher Scientific Inc., Quantum Materials Corporation, Sony Corporation, Nanoco Technologies Ltd., InVisage Technologies, Inc. Nexxus Lighting, QD Laser, Inc., Samsung Electronics Co. Ltd., Evident Technologies, Inc., LG Display Co. Ltd and Nanosys, Inc.

Product Types Covered:

QD Sensors

QD Lasers

QD Lighting

QD Solar Cells

QD Medical Devices

QD Light-emitting Devices (LED) Displays

QD Chips

Applications Covered:

Quantum Optics

Healthcare

Optoelectronics

QD based security & surveillance

Renewable Energy

Technologies Covered:

Fabrication

Bulk-manufacturing

Colloidal Synthesis

Electrochemical assembly

Cadmium-free quantum dots (CFQD)

Viral Assembly

Components Covered:

Tube

Film

LED

Materials Covered:

Silicon (Si)

Cadmium Telluride (CdTe)

Cadmium Selenide (CdSe)

Indium Arsenide (InAs)

Graphene

Cadmium Sulfide (CdS)

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

U.K

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country level segments

Market share analysis of the top industry players

Strategic recommendations for the new entrants

Market forecasts for a minimum of 7 years of all the mentioned segments, sub segments and the regional markets

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

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Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above

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