

# Virtual Retinal Display Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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## Abstracts

The global virtual retinal display market size reached US\$ 14.6 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 108.0 Billion by 2028, exhibiting a growth rate (CAGR) of 36.3% during 2023-2028.

A virtual retinal display (VRD) refers to a head-mounted display device that utilizes low-energy lasers to directly show a picture onto the human retina. It offers user with the illusion of watching a standard-sized display floating several feet away. A virtual retinal display provides numerous benefits, such as enhanced brightness, high contrast, improved resolution, and low power consumption. As a result, it finds a wide range of applications across numerous industries, including healthcare, military, aviation and tactical, engineering, gaming and entertainment, sports, etc.

### Virtual Retinal Display Market Trends:

The increasing demand for enhanced user experience, better content connectivity, and improved Field of View (FoV) while maintaining high levels of privacy is primarily driving the global virtual retinal display market. In addition to this, the rising adoption of virtual and augmented reality in the gaming sector along with the growing integration of VRD with gaming consoles, smartphones, and laptops is further propelling the market growth. Moreover, the widespread utilization of VRD in the healthcare sector with potential applications in therapeutics and surgical procedures is acting as a significant growth-inducing factor. Additionally, the elevating employment of VRD in the engineering industry for providing field employees with access to crucial information, including operational protocols and circuit diagrams, in real-time is also augmenting the growth of the market. Besides this, the expanding usage of VRD in training and simulation activities in the aerospace sector as it saves costs by mimicking the experience and

eliminates the requirement for physical setup, is positively influencing the market growth. Furthermore, the extensive R&D activities for the introduction of advanced VRD technology that offers radiation protection to mitigate any health risk are also propelling the global market. In the coming years, the emerging popularity of lightweight and compact devices that create images with high resolution and in real-time is expected to drive the global virtual retinal display market.

#### Key Market Segmentation:

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

#### Breakup by Technology:

- Optics
- Driver and Controller Electronics
- Light Source
- Others

#### Breakup by Application:

- Aerospace
- Medical
- Gaming and Entertainment
- Sports
- Training and Simulation
- 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 Avegant Corp., Himax Technologies Inc., Innovega Inc., Magic Leap Inc., Omnivision Technologies Inc., Optinvent, QD Laser and Vuzix Corporation.

#### Key Questions Answered in This Report:

How has the global virtual retinal display market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global virtual retinal display market?

What are the key regional markets?

What is the breakup of the market based on the technology?

What is the breakup of the market based on the application?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global virtual retinal display market and who are the key players?

What is the degree of competition in the industry?

## Contents

### **1 PREFACE**

### **2 SCOPE AND METHODOLOGY**

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
  - 2.3.1 Primary Sources
  - 2.3.2 Secondary Sources
- 2.4 Market Estimation
  - 2.4.1 Bottom-Up Approach
  - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

### **3 EXECUTIVE SUMMARY**

### **4 INTRODUCTION**

- 4.1 Overview
- 4.2 Key Industry Trends

### **5 GLOBAL VIRTUAL RETINAL DISPLAY MARKET**

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

### **6 MARKET BREAKUP BY TECHNOLOGY**

- 6.1 Optics
  - 6.1.1 Market Trends
  - 6.1.2 Market Forecast
- 6.2 Driver and Controller Electronics
  - 6.2.1 Market Trends
  - 6.2.2 Market Forecast
- 6.3 Light Source

- 6.3.1 Market Trends
- 6.3.2 Market Forecast
- 6.4 Others
  - 6.4.1 Market Trends
  - 6.4.2 Market Forecast

## **7 MARKET BREAKUP BY APPLICATION**

- 7.1 Aerospace
  - 7.1.1 Market Trends
  - 7.1.2 Market Forecast
- 7.2 Medical
  - 7.2.1 Market Trends
  - 7.2.2 Market Forecast
- 7.3 Gaming and Entertainment
  - 7.3.1 Market Trends
  - 7.3.2 Market Forecast
- 7.4 Sports
  - 7.4.1 Market Trends
  - 7.4.2 Market Forecast
- 7.5 Training and Simulation
  - 7.5.1 Market Trends
  - 7.5.2 Market Forecast
- 7.6 Others
  - 7.6.1 Market Trends
  - 7.6.2 Market Forecast

## **8 MARKET BREAKUP BY REGION**

- 8.1 North America
  - 8.1.1 United States
    - 8.1.1.1 Market Trends
    - 8.1.1.2 Market Forecast
  - 8.1.2 Canada
    - 8.1.2.1 Market Trends
    - 8.1.2.2 Market Forecast
- 8.2 Asia-Pacific
  - 8.2.1 China
    - 8.2.1.1 Market Trends

- 8.2.1.2 Market Forecast
- 8.2.2 Japan
  - 8.2.2.1 Market Trends
  - 8.2.2.2 Market Forecast
- 8.2.3 India
  - 8.2.3.1 Market Trends
  - 8.2.3.2 Market Forecast
- 8.2.4 South Korea
  - 8.2.4.1 Market Trends
  - 8.2.4.2 Market Forecast
- 8.2.5 Australia
  - 8.2.5.1 Market Trends
  - 8.2.5.2 Market Forecast
- 8.2.6 Indonesia
  - 8.2.6.1 Market Trends
  - 8.2.6.2 Market Forecast
- 8.2.7 Others
  - 8.2.7.1 Market Trends
  - 8.2.7.2 Market Forecast
- 8.3 Europe
  - 8.3.1 Germany
    - 8.3.1.1 Market Trends
    - 8.3.1.2 Market Forecast
  - 8.3.2 France
    - 8.3.2.1 Market Trends
    - 8.3.2.2 Market Forecast
  - 8.3.3 United Kingdom
    - 8.3.3.1 Market Trends
    - 8.3.3.2 Market Forecast
  - 8.3.4 Italy
    - 8.3.4.1 Market Trends
    - 8.3.4.2 Market Forecast
  - 8.3.5 Spain
    - 8.3.5.1 Market Trends
    - 8.3.5.2 Market Forecast
  - 8.3.6 Russia
    - 8.3.6.1 Market Trends
    - 8.3.6.2 Market Forecast
  - 8.3.7 Others

8.3.7.1 Market Trends

8.3.7.2 Market Forecast

8.4 Latin America

8.4.1 Brazil

8.4.1.1 Market Trends

8.4.1.2 Market Forecast

8.4.2 Mexico

8.4.2.1 Market Trends

8.4.2.2 Market Forecast

8.4.3 Others

8.4.3.1 Market Trends

8.4.3.2 Market Forecast

8.5 Middle East and Africa

8.5.1 Market Trends

8.5.2 Market Breakup by Country

8.5.3 Market Forecast

## **9 SWOT ANALYSIS**

9.1 Overview

9.2 Strengths

9.3 Weaknesses

9.4 Opportunities

9.5 Threats

## **10 VALUE CHAIN ANALYSIS**

## **11 PORTERS FIVE FORCES ANALYSIS**

11.1 Overview

11.2 Bargaining Power of Buyers

11.3 Bargaining Power of Suppliers

11.4 Degree of Competition

11.5 Threat of New Entrants

11.6 Threat of Substitutes

## **12 PRICE ANALYSIS**

## **13 COMPETITIVE LANDSCAPE**

## 13.1 Market Structure

## 13.2 Key Players

## 13.3 Profiles of Key Players

### 13.3.1 Avegant Corp.

#### 13.3.1.1 Company Overview

#### 13.3.1.2 Product Portfolio

### 13.3.2 Himax Technologies Inc.

#### 13.3.2.1 Company Overview

#### 13.3.2.2 Product Portfolio

### 13.3.3 Innovega Inc.

#### 13.3.3.1 Company Overview

#### 13.3.3.2 Product Portfolio

### 13.3.4 Magic Leap Inc.

#### 13.3.4.1 Company Overview

#### 13.3.4.2 Product Portfolio

### 13.3.5 Omnivision Technologies Inc.

#### 13.3.5.1 Company Overview

#### 13.3.5.2 Product Portfolio

### 13.3.6 Optinvent

#### 13.3.6.1 Company Overview

#### 13.3.6.2 Product Portfolio

### 13.3.7 QD Laser

#### 13.3.7.1 Company Overview

#### 13.3.7.2 Product Portfolio

#### 13.3.7.3 Financials

### 13.3.8 Vuzix Corporation

#### 13.3.8.1 Company Overview

#### 13.3.8.2 Product Portfolio

#### 13.3.8.3 Financials



## List Of Tables

### LIST OF TABLES

Table 1: Global: Virtual Retinal Display Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Virtual Retinal Display Market Forecast: Breakup by Technology (in Million US\$), 2023-2028

Table 3: Global: Virtual Retinal Display Market Forecast: Breakup by Application (in Million US\$), 2023-2028

Table 4: Global: Virtual Retinal Display Market Forecast: Breakup by Region (in Million US\$), 2023-2028

Table 5: Global: Virtual Retinal Display Market: Competitive Structure

Table 6: Global: Virtual Retinal Display Market: Key Players

## List Of Figures

### LIST OF FIGURES

- Figure 1: Global: Virtual Retinal Display Market: Major Drivers and Challenges
- Figure 2: Global: Virtual Retinal Display Market: Sales Value (in Billion US\$), 2017-2022
- Figure 3: Global: Virtual Retinal Display Market Forecast: Sales Value (in Billion US\$), 2023-2028
- Figure 4: Global: Virtual Retinal Display Market: Breakup by Technology (in %), 2022
- Figure 5: Global: Virtual Retinal Display Market: Breakup by Application (in %), 2022
- Figure 6: Global: Virtual Retinal Display Market: Breakup by Region (in %), 2022
- Figure 7: Global: Virtual Retinal Display (Optics) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 8: Global: Virtual Retinal Display (Optics) Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 9: Global: Virtual Retinal Display (Driver and Controller Electronics) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 10: Global: Virtual Retinal Display (Driver and Controller Electronics) Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 11: Global: Virtual Retinal Display (Light Source) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 12: Global: Virtual Retinal Display (Light Source) Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 13: Global: Virtual Retinal Display (Other Technologies) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 14: Global: Virtual Retinal Display (Other Technologies) Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 15: Global: Virtual Retinal Display (Aerospace) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 16: Global: Virtual Retinal Display (Aerospace) Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 17: Global: Virtual Retinal Display (Medical) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 18: Global: Virtual Retinal Display (Medical) Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 19: Global: Virtual Retinal Display (Gaming and Entertainment) Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 20: Global: Virtual Retinal Display (Gaming and Entertainment) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 21: Global: Virtual Retinal Display (Sports) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 22: Global: Virtual Retinal Display (Sports) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 23: Global: Virtual Retinal Display (Training and Simulation) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 24: Global: Virtual Retinal Display (Training and Simulation) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 25: Global: Virtual Retinal Display (Other Applications) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 26: Global: Virtual Retinal Display (Other Applications) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 27: North America: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 28: North America: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 29: United States: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 30: United States: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 31: Canada: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 32: Canada: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 33: Asia-Pacific: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 34: Asia-Pacific: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 35: China: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 36: China: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 37: Japan: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 38: Japan: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 39: India: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 40: India: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$),

2023-2028

Figure 41: South Korea: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 42: South Korea: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 43: Australia: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 44: Australia: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 45: Indonesia: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 46: Indonesia: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 47: Others: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 48: Others: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 49: Europe: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 50: Europe: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 51: Germany: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 52: Germany: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 53: France: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 54: France: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 55: United Kingdom: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 56: United Kingdom: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 57: Italy: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

Figure 58: Italy: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 59: Spain: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022

- Figure 60: Spain: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 61: Russia: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 62: Russia: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 63: Others: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 64: Others: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 65: Latin America: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 66: Latin America: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 67: Brazil: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 68: Brazil: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 69: Mexico: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 70: Mexico: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 71: Others: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 72: Others: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 73: Middle East and Africa: Virtual Retinal Display Market: Sales Value (in Million US\$), 2017 & 2022
- Figure 74: Middle East and Africa: Virtual Retinal Display Market: Breakup by Country (in %), 2022
- Figure 75: Middle East and Africa: Virtual Retinal Display Market Forecast: Sales Value (in Million US\$), 2023-2028
- Figure 76: Global: Virtual Retinal Display Industry: SWOT Analysis
- Figure 77: Global: Virtual Retinal Display Industry: Value Chain Analysis
- Figure 78: Global: Virtual Retinal Display Industry: Porter's Five Forces Analysis

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