

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

https://marketpublishers.com/r/S14BF32D4142EN.html

Date: February 2023

Pages: 144

Price: US\$ 2,499.00 (Single User License)

ID: S14BF32D4142EN

# **Abstracts**

The global smart textiles market size reached US\$ 3.8 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 15.9 Billion by 2028, exhibiting a growth rate CAGR of 24.6% during 2023-2028.

Smart textiles, or e-textiles, refer to the fabrics that are embedded with conductive threads and electronic components. There are two kinds of smart textiles, namely passive and active smart textiles. They can sense or detect the environmental changes and automatically respond to the mechanical, thermal and chemical manipulations. These textiles can also communicate with other devices, conduct energy and modify the physical properties of other materials and textiles to protect the wearer from environmental hazards. Certain textile variants are used for design and fashion purposes while some are used to facilitate human functioning. Owing to these benefits, they find extensive applications across various industries, including military, healthcare, transportation, entertainment and sports and fitness.

The emerging trend of miniaturization of electronics, along with the increasing integration of smart textiles with wearable devices, is one of the key factors driving the growth of the market. In the healthcare and sports sectors, smart textiles are increasingly being used to monitor muscle vibrations, regulate body temperatures and provide protection from various hazards. Furthermore, several innovations in the electronics sector have facilitated the integration of smart textiles with compact electronic components, such as sensors, batteries and control consoles, in wearable and electronic devices. Additionally, increasing product adoption in the defense sector is acting as another growth-inducing factor. For instance, smart textiles are combined with defense equipment for health monitoring, wired and wireless communications, superior mobility, sensing of heat and cold stresses and camouflage. This, along with



technological advancements and extensive research and development (R&D) activities, is projected to drive the market further.

# Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global smart textiles market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on type, functionality and end-use sector.

Breakup by Type:

Passive Smart Textile
Active Smart Textile

Breakup by Functionality:

Sensing
Energy Harvesting
Luminescence and Aesthetics
Thermoelectricity
Others

Breakup by End-Use Sector:

Military and Protection
Healthcare
Sports and Fitness
Fashion and Entertainment
Transportation
Architecture
Others

Breakup by Region:

North America United States Canada Asia Pacific China



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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 with some of the key players being Adidas AG, AiQ Smart Clothing Inc., Clothing+, Dupont De Nemours Inc., Gentherm Incorporated, Google LLC, Interactive Wear AG, Ohmatex A/S, Schoeller Textil AG, Sensoria Inc., Texas Instruments Incorporated, Textronics, Vista Medical Ltd., etc.

#### Key Questions Answered in This Report

- 1. What was the size of the global smart textiles market in 2022?
- 2. What is the expected growth rate of the global smart textiles market during 2023-2028?
- 3. What are the key factors driving the global smart textiles market?
- 4. What has been the impact of COVID-19 on the global smart textiles market?
- 5. What is the breakup of the global smart textiles market based on the type?
- 6. What is the breakup of the global smart textiles market based on the functionality?
- 7. What is the breakup of the global smart textiles market based on the end-use sector?
- 8. What are the key regions in the global smart textiles market?
- 9. Who are the key players/companies in the global smart textiles market?



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